

Department of Planning, Housing and Infrastructure

dphi.nsw.gov.au



Sundown Solar Farm

State Significant Development Assessment Report (SSD-8911)

June 2026





Acknowledgement of Country

The Department of Planning, Housing and Infrastructure acknowledges that it stands on Aboriginal land. We acknowledge the Traditional Custodians of the land and show our respect for Elders past and present through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

Published by NSW Department of Planning, Housing and Infrastructure

dphi.nsw.gov.au

Sundown Solar Farm (SSD-8911) Assessment Report

Published: June 2026

Copyright and disclaimer

© State of New South Wales through Department of Planning, Housing and Infrastructure 2026. Information contained in this publication is based on knowledge and understanding at the time of writing, June 2026, and is subject to change. For more information, please visit nsw.gov.au/copyright.

Preface

This assessment report provides a record of the Department of Planning, Housing and Infrastructure's (the Department) assessment and evaluation of the State significant development (SSD) application for the Sundown Solar Farm, located at Spring Mountain in the Inverell Shire Local Government Area, lodged by Sundown SF Subco Pty Ltd. The report includes:

- an explanation of why the project is considered SSD and who the consent authority is;
- an assessment of the project against government policy and statutory requirements, including mandatory considerations;
- a demonstration of how matters raised by the community and other stakeholders have been considered;
- an explanation of any changes made to the project during the assessment process;
- an assessment of the likely environmental, social and economic impacts of the project;
- an evaluation which weighs up the likely impacts and benefits of the project, having regard to the proposed mitigations, offsets, community views and expert advice; and provides a view on whether the impacts are on balance, acceptable; and
- an opinion on whether the project is approvable or not, along with the reasons, to assist the Independent Planning Commission in making an informed decision about whether development consent for the project can be granted and any conditions that should be imposed.

Executive Summary

Sundown SF Subco Pty Ltd, a subsidiary of Recurrent Energy (Australia) Pty Ltd (Recurrent Energy), proposes to develop a 360 megawatt (MW) State significant development solar farm and associated 150 MW / 600 MW-hour (MWh) battery energy storage system, at a site located between Inverell and Glen Innes, in the Inverell Shire local government area, within the New England Renewable Energy Zone (New England REZ).

The site is zoned RU1 Primary Production and is on land that has been largely cleared for grazing, has an existing 330 kilovolt (kV) transmission line that traverses the site and is in close proximity to the State road network. It is located in a sparsely populated rural area, with the closest non-associated residence approximately 2.1 kilometres (km) from the solar farm.

The Department of Planning, Housing and Infrastructure (the Department) exhibited the Environmental Impact Statement (EIS) for the project for 28 days between 7 July 2023 and 3 August 2023, and received 137 public submissions, comprising 130 individual public submissions and seven from special interest groups. The project received 128 objections, 5 support and 4 comments.

The majority of objections (119) were from submitters located more than 5 km from the proposed site, with the vast majority of these located more than 50 km away.

The project was significantly delayed due to Recurrent Energy being unable to obtain landowner's consent until 2025 for road upgrades to a key part of the haulage route near the site that extended outside the dedicated road reserve.

Recurrent Energy subsequently submitted its Submissions Report in June 2025.

Inverell Shire Council (Council) did not object to the project and provided comments, including matters regarding traffic, waste and community benefits.

The Department consulted with relevant government agencies and utility providers on key issues and inspected the site. Advice was received from 13 government agencies. None of the agencies objected to the project, and they each recommended the implementation of appropriate mitigation and management measures.

Recurrent Energy provided a Submissions Report and additional information addressing matters raised by Council, agencies and public submissions. This included revising the development footprint to exclude some fragmented areas of native vegetation, and a commitment to implement perimeter fencing to clearly delineate the development footprint from its surrounds. As a result, the overall development footprint was reduced from approximately 651 hectares (ha) to approximately 525 ha, with the NSW Conservation Programs Heritage and Regulation Group's (CPHR) advising it had no further concerns with the project following these changes.

The key assessment matters are energy transition, land use compatibility, traffic and biodiversity. The Department has undertaken a comprehensive assessment and has recommended conditions, developed in conjunction with agencies and Council, to ensure all potential impacts are effectively avoided, minimised, managed and/or offset.

The project area primarily comprises Land and Soil Capability (LSC) classes 3, 4, and 6, and land mapped as Biophysical Strategic Agricultural Land (BSAL). The project would not significantly

reduce the overall agricultural productivity of the region and the site could be returned to agricultural uses in the future.

The Department considers that the project would not result in unacceptable impacts on the capacity, efficiency or safety of the road network. Potential traffic impacts would be largely restricted to the 21-month construction period and would be suitably managed through road upgrades, restricting vehicles to approved routes, road maintenance, and the implementation of a Traffic Management Plan.

The project is consistent with the Commonwealth's *Renewable Energy Target*, and NSW's *Climate Change Policy Framework* and *Net Zero Plan Stage 1: 2020 – 2030*, as it would contribute 360 MW of renewable energy to the National Electricity Market, including a battery with a capacity of 150 MW / 600 MWh. Importantly, the battery would enable the project to store energy for dispatch to the grid outside of daylight hours and / or during periods of peak demand, which has the potential to contribute to increased grid stability and energy security.

The project has been designed to utilise topography and minimise impacts to existing vegetation in and around the site, whilst also largely avoiding key constraints, including amenity impacts to non-associated residences (noting there are no non-associated residences within 2 km of the solar farm), watercourses, and Aboriginal heritage sites.

The Department considers the site appropriate for the project as it has good solar resources, direct access to the existing electricity network, good transport links, is located in a sparsely populated area on land that has been largely cleared for grazing, and is consistent with NSW's *Large Scale Solar Energy Guideline*.

The project would also provide flow-on benefits to the local community, including up to 200 construction jobs, about 3 operational jobs, and contributions to Council through a Voluntary Planning Agreement (VPA), which would comprise payment of \$850 per MW per annum in accordance with the *NSW Benefit Sharing Guideline* to be paid annually and adjusted for consumer price index. In addition, there would be broader benefits to the State through an injection of approximately \$689.5 million in capital investment into the NSW economy.

The Department considers the project would not result in any significant adverse impacts on the local community or the environment, and any residual impacts could be managed through the implementation of the recommended conditions.

Overall, the Department's assessment concludes that the project would result in benefits to the State of NSW and considers the project is in the public interest. As such, the Department concludes that the project is approvable subject to conditions.

Contents

Preface	i
Executive Summary	ii
1 Project	1
1.1 Project overview.....	1
2 Strategic context	7
2.1 Site and Surrounds	7
2.2 Other Energy Projects	7
2.3 Energy Context.....	8
2.4 NSW Solar Guideline.....	9
3 Statutory context	10
3.1 State Significant Development.....	10
3.2 Permissibility.....	10
3.3 Integrated and Other approvals.....	11
3.4 Commonwealth Approvals	11
3.5 Renewable Energy Zone	12
3.6 Mandatory Matters for Consideration.....	12
4 Engagement	14
4.1 Department’s engagement on the EIS.....	14
4.2 Summary of Council submission.....	14
4.3 Summary of advice received from government agencies.....	14
4.4 Summary of public submissions	16
4.5 Response to submissions.....	18
5 Assessment	19
5.1 Energy Transition.....	19
5.2 Land Use Compatibility	19
5.3 Traffic and Transport.....	22
5.4 Biodiversity	25
5.5 Other issues.....	31
6 Evaluation	47
Appendices	49

Appendix A – Environmental Impact Statement	49
Appendix B – Submissions.....	49
Appendix C – Agency Advice.....	49
Appendix D – Submissions Report.....	49
Appendix E – Additional Information	49
Appendix F – Recommended Development Consent.....	49
Appendix G – Consideration of Community Views	49
Appendix H – Statutory considerations.....	55
Appendix I – Assessment of Matters of National Environmental Significance	61

1 Project

1.1 Project overview

1. Sundown SF Subco Pty Ltd, a subsidiary of Recurrent Energy (Australia) Pty Ltd (Recurrent Energy), proposes to develop a 360 megawatt (MW) solar farm and an associated 150 MW / 600 MW-hour (MWh) battery energy storage system (BESS) (the project), on a site in the Inverell Shire local government area (LGA), approximately 30 kilometres (km) east of Inverell and 38 km west of Glen Innes (see **Figure 1**). The project is located in the New England Renewable Energy Zone (New England REZ) and in close proximity to the State road network (Gwydir Highway).
2. The project would involve the construction of a solar farm, BESS, 330 kilovolt (kV) on-site substation (to connect to the existing Transgrid 330 kV transmission line that traverses the site), ancillary infrastructure, and upgrading and decommissioning of equipment over time. Construction of the project would last approximately 21 months, with a peak construction period of approximately 14 months.
3. The key components of the project are summarised in **Table 1**, illustrated in **Figure 2** and **Figure 3**, and described in detail in the Environmental Impact Statement (EIS) and supporting documentation (see **Appendix A**, **Appendix D**, and **Appendix E**).

Table 1 | Key components of the project

Aspect	Description
Project Summary	<p>The project would have:</p> <ul style="list-style-type: none">• approximately 660,000 solar panels mounted on a single axis tracking system (up to 4 metres (m) high) with a generating capacity of up to 360 MW;• a BESS with up to 150 MW / 600 MWh capacity;• an on-site 330 kV substation and switchyard and connection into Transgrid's 330 kV overhead transmission line;• demountable offices, amenities and equipment sheds;• ancillary infrastructure including internal access roads, parking, temporary laydown areas (during construction and decommissioning), demountable offices and staff amenities, onsite creek crossings, security fencing, lighting, and fire fighting infrastructure; and• road and intersection upgrades (detailed below).
Project Area	<ul style="list-style-type: none">• Project area: 2,097 hectares (ha)• Development footprint: 525 ha
Site entry and access route	<ul style="list-style-type: none">• Delivery vehicles would travel to the site from Port of Newcastle.• The site would be accessed from the Gwydir Highway, Spring Mountain Road and Sturmans Road.• All vehicles would access the site via an existing site access point off Sturmans Road.

Aspect	Description
	<ul style="list-style-type: none"> • In the event of an emergency, two access points would be available for use including: <ul style="list-style-type: none"> – the main site entry point from Sturmans Road, leading onto Spring Mountain Road; and – a secondary emergency access/egress point at the northern boundary of the site, leading onto an existing rural access road that links the Swan Brook property to the north (via an access easement) to the Gwydir Highway. • The project would include the widening of the Spring Mountain Road and Sturmans Road to 8.7 m. The upgraded roads would be compacted and gravelled. • The existing reinforced concrete box culvert on Spring Mountain Road (over Swan Brook Creek) and the existing bridge on Sturmans Road (over Kings Creek) would be upgraded to accommodate project traffic. • The existing culverts and bed level crossings on the access road would be upgraded to accommodate project traffic. • The project also includes the installation of channelised right (CHR) and basic left turn (BAL) treatments at the Gwydir Highway/Spring Mountain Road intersection (if the BAL has not already been installed by White Rock Wind Farm, noting this is a requirement of its development consent).
Construction	<ul style="list-style-type: none"> • Construction of the project would take approximately 21 months from the commencement of site establishment works, with a peak construction period of 14 months. Construction hours would be limited to Monday to Friday 7 am to 6 pm and Saturday 8 am to 1 pm.
Operation	<ul style="list-style-type: none"> • The expected operational life of the infrastructure is approximately 35 years. However, the project could involve infrastructure upgrades that may extend the operational life. • The solar farm and BESS would operate 24 hours a day, seven days a week.
Decommissioning and rehabilitation	<ul style="list-style-type: none"> • At the end of the project life, all above and below-ground infrastructure, where buried above 500 millimetres (mm) in depth, would be removed and the land rehabilitated (i.e. restore land capability to pre-existing productive capacity).
Subdivision	<ul style="list-style-type: none"> • Proposed subdivision of Lot 1 DP 1064358 to accommodate the substation and BESS (see Figure 4).
Employment	<ul style="list-style-type: none"> • Up to 400 full time equivalent (FTE) construction jobs and approximately 2 or 3 FTE operational jobs.
Estimated development cost	<ul style="list-style-type: none"> • Approximately \$689.5 million.

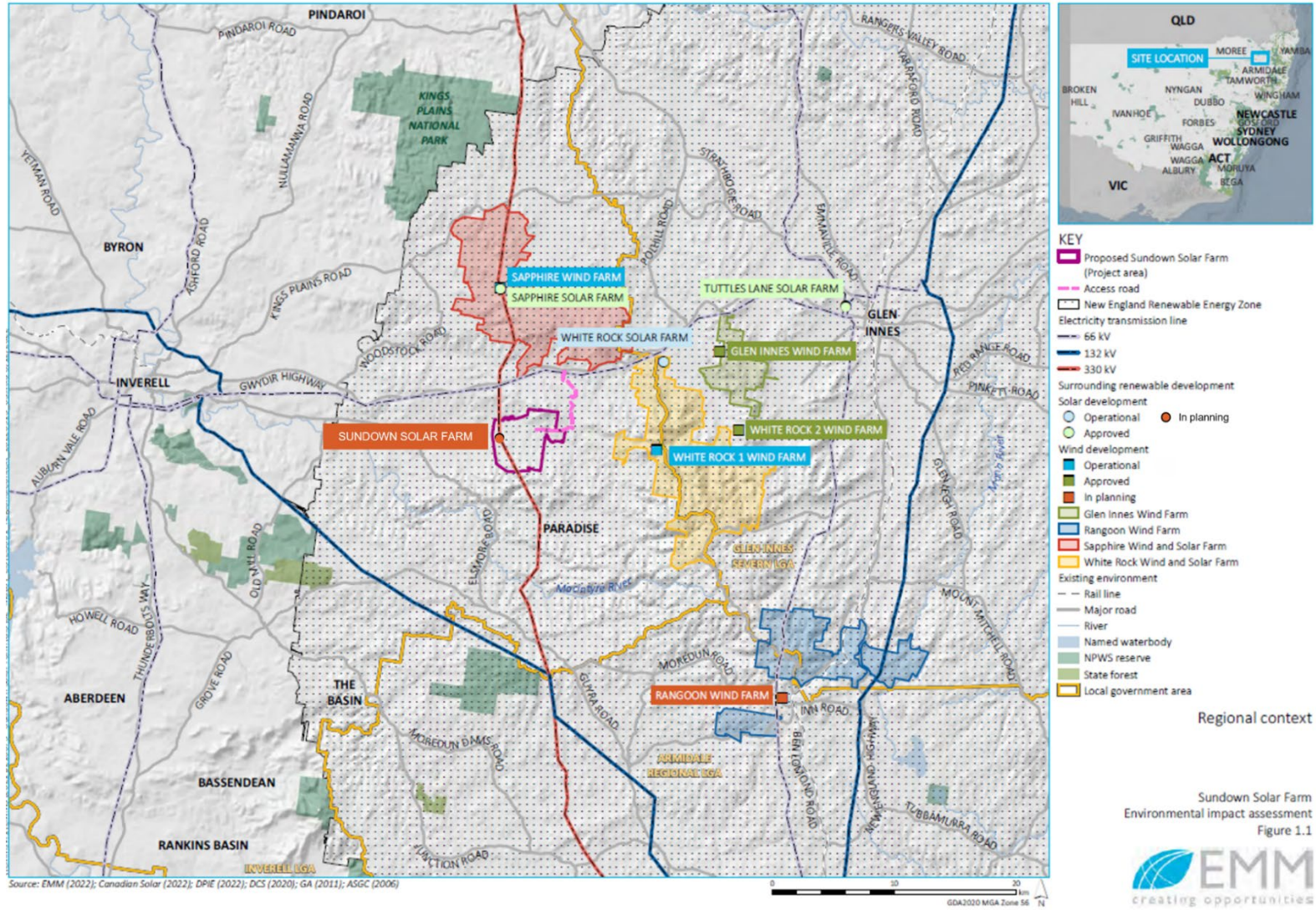


Figure 1 | Regional context map

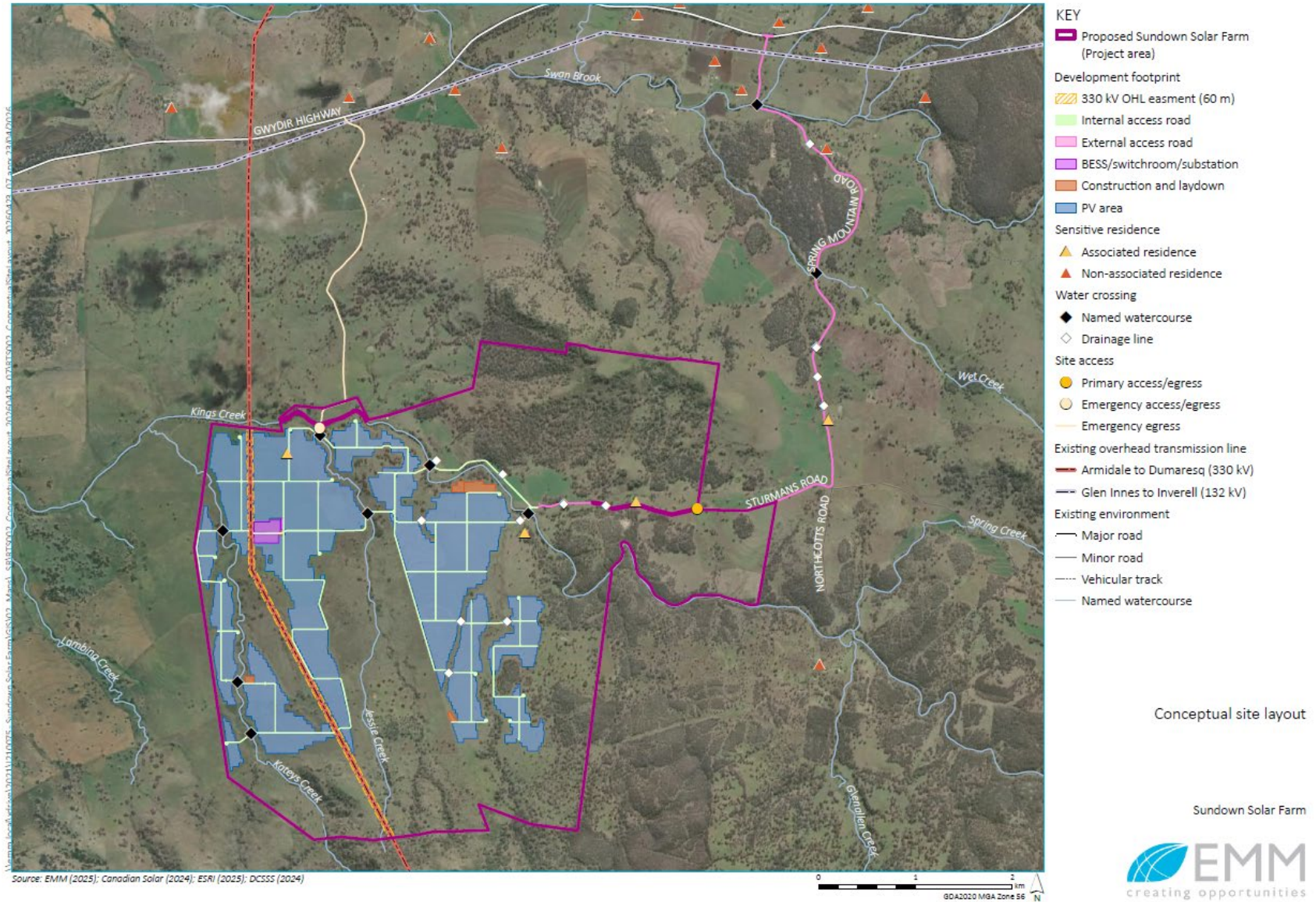


Figure 2 | Project layout and site access

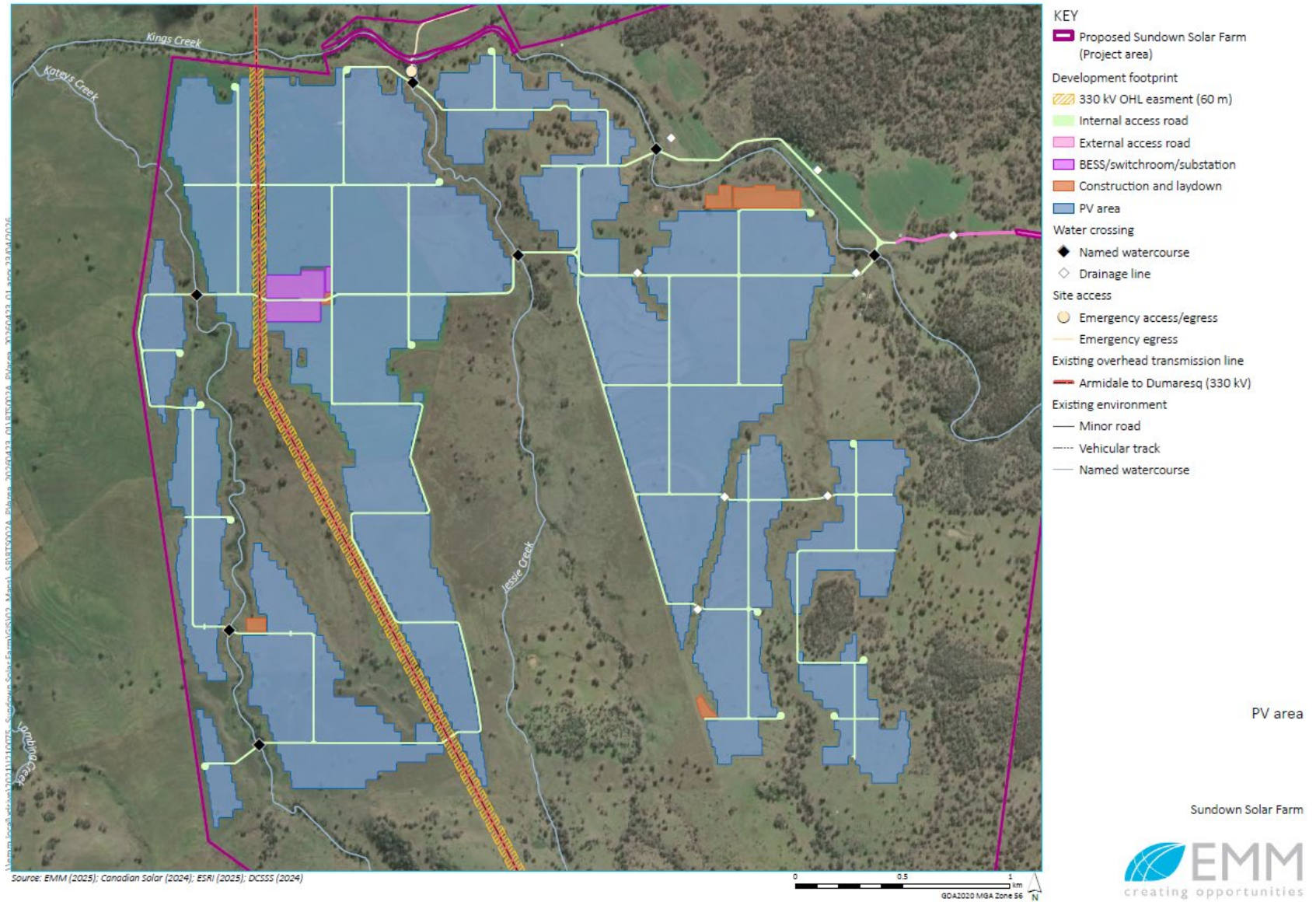


Figure 3 | Project layout (solar farm)

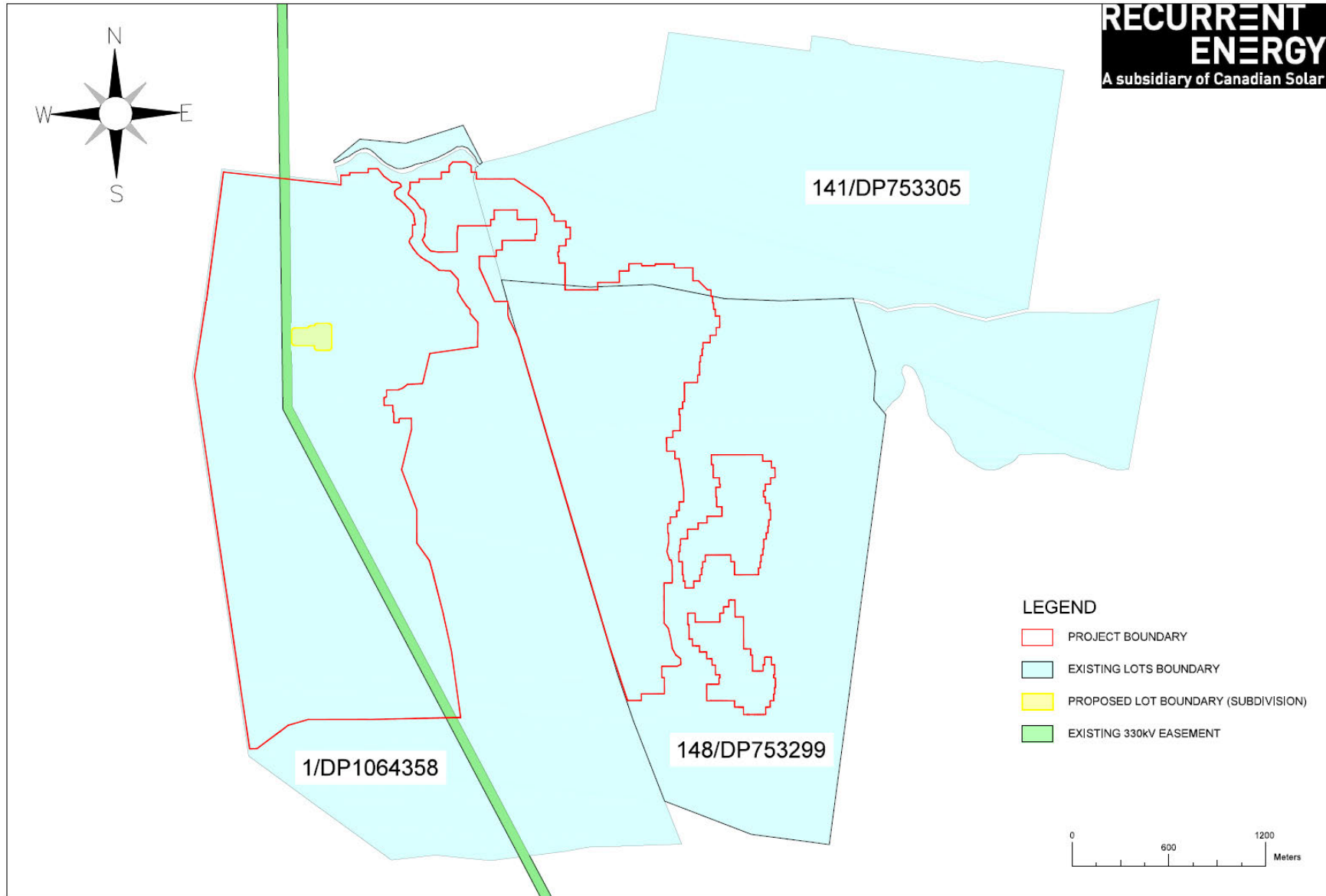


Figure 4 | Proposed Subdivision

2 Strategic context

2.1 Site and Surrounds

4. The site is largely cleared agricultural land zoned RU1 Primary Production, the majority of which is currently used for cattle livestock grazing.
5. Access to the site is via the Gwydir Highway, Spring Mountain Road and Sturmans Road.
6. The project area primarily comprises Land and Soil Capability (LSC) classes 3, 4, and 6, and land mapped as Biophysical Strategic Agricultural Land (BSAL).
7. Several ephemeral watercourses traverse the development footprint and drain generally from south to north. These include Kateys Creek (third order) and Jessie Creek (second order), as well as several unnamed first and second order watercourses, all of which drain to Kings Creek. Kings Creek is a fourth order watercourse flowing generally to the west and joins the MacIntyre River east of Inverell.
8. The closest non-associated receiver (R1) is located approximately 2.1 km from the proposed solar farm.
9. In June 2025, Recurrent Energy entered into an impact agreement with the landowner of residence R15 located on Spring Mountain Road. This agreement allows the existing alignment of Spring Mountain Road (which travels through the mapped property boundary of R15) to be used for vehicular access. The impact agreement covers all impacts generated by the project, which makes R15 an associated residence for the purposes of assessment.

2.2 Other Energy Projects

10. There are five State significant renewable energy projects within 50 km of the site, which are all either approved or operational (see **Table 2**). As per the Department's *Cumulative Impact Assessment Guidelines for State Significant Projects 2021*, Recurrent Energy and the Department's assessments of cumulative impacts have considered the relevant future projects to be those that have been exhibited and are currently under assessment.
11. Potential cumulative impacts at a regional level include traffic, workforce accommodation and agricultural land, and are discussed in **Section 5**.

Table 2 | Other Energy Projects

Project	Capacity	Approximate distance from the project	Status
Sapphire Wind Farm (MP09_0093)	270 MW	3 km north	Operational
White Rock Wind Farm (MP 10_0160)	175 MW	4 km east	Stage 1 operational. Stage 2 is approved (construction has not commenced)
White Rock Solar Farm (SSD-7487)	20 MW	10 km east	Operational
Glen Innes Wind Farm (MP07_0036)	54 – 81 MW	12 km north-east	Approved. Construction has not commenced.
Sapphire Solar Farm (SSD-8643)	180 MW	15 km north	Approved. Construction has not commenced.

2.3 Energy Context

- In 2024, NSW derived approximately 37% of its energy from renewable sources, the remainder being from fossil fuels, including 60% from coal and 3% from gas.
- The project’s alignment with existing national, State, and local policies and strategies are considered in **Table 3**.

Table 3 | Energy Context

Policy / Year	Summary
<i>Australia’s Long Term Emissions Reduction Plan (2021)</i>	Sets a pathway to net zero emissions by 2050 and affirms Australia’s commitment to meeting its revised 2030 target (43% below 2005 levels).
<i>Australian Energy Market Operator’s 2024 Integrated System Plan (ISP)</i>	The ISP notes that: <ul style="list-style-type: none"> without coal, investment is needed to meet significantly increased electricity demand requiring a nine-fold increase in large-scale variable renewable energy generation (wind and solar) a mix of solar and wind is needed, and they offer complementary daily and seasonal profiles; and

Policy / Year	Summary
	<ul style="list-style-type: none"> forecasts that there will be a demand for 83 GW of utility-scale wind and solar in the National Electricity Market by 2034-35, and 127 GW by 2049-50.
<p><i>NSW:</i></p> <p><i>Climate Change Policy Framework (2016)</i></p> <p><i>Transmission Infrastructure Strategy (2018)</i></p> <p><i>Electricity Strategy (2019)</i></p> <p><i>Electricity Infrastructure Roadmap (2020)</i></p> <p><i>Net Zero Plan Stage 1: 2020 – 2030 (2020) and Implementation update (2022)</i></p> <p><i>New England North West Regional Plan 2041</i></p> <p><i>Inverell Regional Local Environmental Plan 2012</i></p>	<p>Relevant aspects of these policy documents include:</p> <ul style="list-style-type: none"> aims to achieve net zero emissions in NSW by 2050 and reduce emissions by 70% below 2005 levels by 2035; notes that all coal fired power plants in NSW are scheduled for closure within the next 15 years; are aimed at encouraging investment in new electricity infrastructure and unlocking additional generation capacity in order to ensure secure and reliable energy in NSW; regional goals to support the State’s transition to lower emissions and Council goals to promote renewable energy production; identifies the growth of the New England North West region as a leader of renewable energy in NSW which will contribute to the region’s economic diversification; and New England REZ was declared in December 2021 and is the first step in formalising the REZ under the <i>Electrical Infrastructure Investment Act</i> (EII Act).

2.4 NSW Solar Guideline

- The Department of Planning, Housing and Infrastructure (the Department) released the revised *Large-Scale Solar Energy Guideline* (the Solar Guideline) in August 2022 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. The Department’s Solar Guideline (2022) applies to the assessment as it was in force at the time of the development application.
- The Department released an updated Solar Guideline in November 2024, which does not change the key outcomes of the assessment. Recurrent Energy has considered the potential visual and landscape impacts of the project in accordance with the revised guideline, and the Department considers that the project is consistent with the principles set out in the revised guideline.
- The Solar Guideline recognises that large-scale solar projects could help to reduce reliance on fossil fuels, thereby contributing to reduction in air pollution and greenhouse gas emissions, while also supporting regional NSW through job creation and investment in communities that may not have similar opportunities from other industries.

3 Statutory context

3.1 State Significant Development

17. The project is classified as State significant development (SSD) under section 4.36 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). This is because it triggers the criteria in section 20 of the *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.
18. Under section 4.5(a) of the EP&A Act and Clause 1(b) of section 2.7 of the Planning Systems SEPP, the Independent Planning Commission (the Commission) is the consent authority for the development as the project has received more than 50 unique public submissions by way of objection.

3.2 Permissibility

19. The site is zoned RU1 Primary Production under the *Inverell Local Environmental Plan 2012* (Inverell LEP), the provisions of which are discussed in **Section 5.2**. The project also includes a series of road upgrades to accommodate the movement of heavy vehicles requiring escort (HVRE) vehicles travelling from port to site. These road upgrades are proposed to occur on land zoned RU1 Primary Production, R1 General Residential, MU1 Mixed Use, E3 Productivity Support, and E2 Commercial Centre.
20. Electricity generating works are permissible with consent on any land in a prescribed non-residential zone, including RU1, under clause 2.36 of the *State Environmental Planning Policy (Transport and Infrastructure) 2021* (Transport and Infrastructure SEPP). Consequently, the project is permissible with development consent.
21. The proposed subdivision would result in the creation of two new lots that would comprise areas below the minimum lot size of 200 ha and would be prohibited under the Inverell LEP. Notwithstanding this, section 4.38(3) of the EP&A Act allows development consent to be granted for SSD applications where the development is partially prohibited. While the consent authority can override a partial prohibition for a SSD, it must assess the merits of such a decision. The Department is satisfied that the proposed subdivision does not conflict with the objectives of the Inverell LEP on the grounds that the proposed subdivision:
 - would not impact sustainable primary industry production from occurring on surrounding allotments;
 - would not cause the fragmentation and alienation of resource lands; and
 - would not impact the agricultural value of surrounding rural land.
22. The Department also notes:
 - Inverell Shire Council (Council) did not raise concern with the subdivision;

- the subdivision would enable ownership of select parcels to be transferred to the agreed party, to facilitate project delivery and future-proof the ownership of electricity infrastructure for the approved solar farm;
 - the subdivision would not result in any additional dwelling entitlements; and
 - the subdivision is consistent with the objectives of the RU1 zone as it would encourage diversity in primary industry enterprises and systems appropriate for the area.
 - the project aligns with the RU1 zone’s key objective by supporting diversity and primary industry enterprises; and
 - the Department has fully considered the impacts of the project and considers it can be approved.
23. Based on the above assessment, and via section 4.38(3) of the EP&A Act, the Department is satisfied that the project, including the subdivision of the site, is permissible with consent on the site.

3.3 Integrated and Other approvals

24. Under section 4.41 of the EP&A Act, a number of other approvals are integrated into the SSD approval process and therefore are not required to be separately obtained for the project. Under section 4.42 of the EP&A Act, a number of further approvals are required, provided such approvals are substantially consistent with any development consent for the project (e.g. approvals for any works under the *Roads Act 1993*).
25. As part of the development footprint comprises Crown land, an application for tenure through NSW Crown Lands is required pursuant to the *NSW Crown Land Management Act 2016*.
26. The Department has consulted with and considered the advice of the relevant government agencies responsible for the integrated and other approvals in its assessment of the project (see **Section 4** and **Section 5**). Suitable conditions have been included in the recommended conditions of consent (see **Appendix F**).

3.4 Commonwealth Approvals

27. Under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act), assessment and approval are required from the Australian Government Department of Climate Change, Energy, the Environment and Water (AG DCCEEW) if a project is likely to impact on a Matter of National Environmental Significance (MNES), as it is considered to be a “controlled action”.
28. On 29 August 2022, a delegate for the AG DCCEEW declared the project to be a controlled action in accordance with sections 18 and 18A of the EPBC Act. Consequently, the project requires the approval of the Commonwealth Minister for the Environment and Water (Commonwealth Minister) in addition to any State approvals before the project may proceed.

29. The assessment process under the EP&A Act has been accredited under a Bilateral Agreement with the AG DCCEEW under Chapter 3 of the EPBC Act. Accordingly, the NSW Government has undertaken the assessment of MNES on behalf of the AG DCCEEW.
30. The Department's assessment of the potential impacts of the project on MNES under the EPBC Act is provided in **Section 5.4**. Further information on the matters that the Commonwealth Minister must consider is provided in **Appendix I**.
31. The Department consulted with the AG DCCEEW in accordance with the Bilateral Agreement and provided draft copies of this assessment report and the recommended conditions of consent to the AG DCCEEW for comment. The AG DCCEEW confirmed that this assessment report contains the information required by the AG DCCEEW to make a decision about the project and that the recommended conditions of consent provide appropriate protection in relation to Commonwealth matters.

3.5 Renewable Energy Zone

32. The *Electricity Infrastructure Investment Act 2020* (EII Act) coordinates investment in transmission, generation, storage and firming infrastructure in NSW and gives effect to the *Electricity Infrastructure Roadmap*. Under section 19 of the EII Act, the Minister for Energy may declare a renewable energy zone comprising a specified geographical area of the State, and specified generation, storage or network infrastructure.
33. This project is located in the geographical area specified in the New England REZ declaration, which would comprise all planned, new and existing network infrastructure, with an intended network capacity of up to eight gigawatts.
34. NSW Energy Corporation (EnergyCo) were consulted for comment on the Submissions Report and draft conditions and responded confirming it had no comments.

3.6 Mandatory Matters for Consideration

35. Section 4.15 of the EP&A Act outlines the matters that a consent authority must take into consideration when determining development applications. The Department has considered these matters in its assessment of the project, as well as Recurrent Energy's consideration of environmental planning instruments in the EIS. The Department has also considered relevant provisions of the environmental planning instruments in **Appendix H**.

3.6.1 Objects of the EP&A Act

36. In determining the application, the consent authority should consider whether the project is consistent with the relevant objects of the EP&A Act (section 1.3) including the principles of ecologically sustainable development (ESD). Consideration of those factors is described in **Appendix H**. As a result, the Department is satisfied that the development is consistent with the objectives of the EP&A Act and the principles of ESD.

3.6.2 Biodiversity development assessment report

37. Section 7.9(2) of the *Biodiversity Conservation Act 2016* (BC Act) requires all SSD applications to be accompanied by a Biodiversity Development Assessment Report (BDAR) unless it is determined that the project is not likely to have any significant impact on biodiversity values (as identified in the BC Act and in the *Biodiversity Conservation Regulation 2017* (BC Regulation)). The BDAR and the overall impact of the project on biodiversity values is assessed in **Section 5.4** of this report.

3.6.3 Draft Development Consent

38. The Department has included discretion in a small number of the draft conditions as a mechanism for an applicant to seek approval from the Secretary for minor matters that do not warrant a modification application. Such matters include, vehicle numbers, timing of road upgrades, timing of management plans, and improvements to battery technology that have no additional environmental impact.
39. This discretion is subject to the same level of scrutiny and assessment as any modification, against applicable legislation, policies and guidelines. Importantly, consultation is undertaken with all stakeholders relevant to any particular request, including councils, agencies, roads authorities and the public.
40. NSW has an urgent need for renewable energy generation and technologies are rapidly advancing. Some detailed design factors are only known upon financial close or execution of contracts with contractors, which occurs post development approval.
41. This discretion is a crucial tool in providing an avenue to achieve outcomes and resolutions for progressed projects that are working towards construction, or are under construction.
42. In summary, the Department provides Planning Secretary's Discretion provisions to:
- account for updated technology at the time of construction from the time of approval, allowing applicants to construct and utilise technologies which would not result in additional impacts; and
 - account for changes required when an applicant receives financial investment and can appoint contractors. The appointment of these contractors often necessitates some project refinements as project details are finalised;
 - provide scope for applicants where changes would not be sufficient enough to warrant a modification; and
 - account for works already undertaken, for example should the required road upgrades be delivered by another party (including roads authorities) as part of broad network upgrades.
43. Significantly, discretion is only ever exercised following the Department's assessment of the request, which is undertaken in consultation with relevant stakeholders.

4 Engagement

4.1 Department’s engagement on the EIS

- 44. The Department publicly exhibited the EIS from 7 July 2023 to 3 August 2023, advertised the exhibition in The Australian and the Inverell Times, and notified nearby landowners within a 4 km radius of the site boundary.
- 45. The Department consulted with Council and relevant government agencies throughout the assessment and inspected the site in August 2025.
- 46. The Department notified and sought feedback from Transgrid and Transport for NSW (TfNSW) in accordance with the Transport and Infrastructure SEPP. The Department also sought comment from EnergyCo.

4.2 Summary of Council submission

- 47. Council did not object to the project and raised matters regarding:
 - road and traffic impacts during construction;
 - waste generation and management;
 - community benefits; and
 - noted that there had been significant community interest in the project.
- 48. Recurrent Energy consulted with Council to address its concerns and further responded to Council’s comments within the Submissions Report.
- 49. Following review of the Submissions Report, Council requested further information about traffic movements and road upgrades. This matter was later resolved with design refinements in consultation with TfNSW. Council confirmed that all concerns were resolved and no further comments were raised. Further detail is provided in **Section 5.3.2**.

4.3 Summary of advice received from government agencies

- 50. During EIS exhibition, the Department received advice from 13 government agencies, as summarised in **Table 4** below. A link to the full copies of the advice is provided in **Appendix C**.

Table 4 | Summary of agency advice

Agency	Advice summary
NSW Department of Climate Change, Energy, the Environment and Water (NSW)	Raised several issues regarding the BDAR. This included impacts to the Critically Endangered Ecological Community (CEEC) Box Gum Woodland, which is a candidate Serious and Irreversible Impact (SII) entity. As a result, the recommendation was to revise the proposal through project redesign to reduce

Agency	Advice summary
DCCEEW) Conservation Programs Heritage and Regulation Group (CPHR)	<p>these biodiversity impacts and to provide additional measures to further compensate for any remaining impacts.</p> <p>Recurrent Energy revised the development footprint as part of the Submissions Report and revised BDAR, and CPHR confirmed that its issues had been resolved and the only additional query related to the need for additional details regarding the proposed perimeter fencing, which was subsequently provided by Recurrent Energy.</p>
NSW DCCEEW – Water Group	Supported Recurrent Energy’s commitment to have watercourse setbacks and crossings, and recommended that works within waterfront land be carried out in accordance with the <i>Guidelines for Controlled Activities on Waterfront Land</i> , which Recurrent Energy committed to in its Submissions Report.
Department of Primary Industries and Regional Development (DPIRD) – Agriculture (DPI Agriculture)	<p>Provided recommendations for operational and decommissioning measures to minimise land use conflict and environmental impacts during operation.</p> <p>Following review of the Submissions Report, DPI Agriculture requested additional information regarding:</p> <ul style="list-style-type: none"> • Land Use Conflict Risk Assessment (LUCRA); • Soil, Land, and Agricultural Assessment (SLAA); • Soil survey and Land and Soil Class (LSC) verification; and • Cumulative impact assessment with regard to LSC Class 3 land in a land zone that permits an agricultural land use. <p>These matters were subsequently satisfied in a request for further information (RFI) response from Recurrent Energy and the Department has recommended conditions of consent which require mitigation measures and reinstatement of the agricultural capability of the land following decommissioning.</p>
DPIRD Fisheries (DPI Fisheries)	Provided recommendations for the design of waterway crossings and riparian buffer zones in accordance with relevant guidelines. The Department included these in the recommended conditions of consent.
Fire and Rescue NSW (FRNSW)	Recommended preparation of a Fire Safety Study (FSS), Emergency Plan (EP), Emergency Services Information Package (ESIP), and Emergency Responders Induction Package. The Department included these within the recommended conditions of consent.
NSW Rural Fire Service (RFS)	Made several recommendations relating to bushfire protection, to be incorporated into any consent granted for the project. The Department has included these within the recommended conditions of consent.
Heritage NSW Group within NSW DCCEEW (HNSW) – Aboriginal Cultural Heritage	Recommended revision of the Aboriginal Cultural Heritage Assessment Report (ACHAR) to address insufficiencies regarding community consultation, currency of Aboriginal Heritage Information Management System (AHIMS) search and mapping, archaeological assessment, scarred trees, and preparation of an Aboriginal Cultural Heritage Management Plan (ACHMP). Recurrent Energy

Agency	Advice summary
	addressed these matters within their Submissions Report, and HNSW confirmed that all outstanding matters had been addressed.
TfNSW	<p>Requested additional information regarding the traffic intensification at the Gwydir Highway / Spring Mountain Road intersection, traffic survey details, consultation details, shuttle bus services, swept path analysis of HVRE routes, intersection design and rail impacts.</p> <p>Recurrent Energy provided additional information as part of their Submissions Report, which TfNSW reviewed and provided some minor residual comments. The Department provided draft conditions of consent to TfNSW, who provided some suggested conditions which the Department has included in the recommended condition set.</p>
NSW Crown Lands	Noted that the vehicle access from Gwydir Highway onto Spring Mountain Road would require road widening works which would intrude onto adjacent Crown land and that a permit would be required to enable construction where the intersection impinges on Crown land. However, during the course of assessment, permits have become no longer available for Crown lands use. In response to this issue, Recurrent Energy proposed that the applicable portions of Crown land along Spring Mountain Road and Sturmans Road would be transferred to Council ownership at post-approval stage and the transfer would be managed by Recurrent Energy. Both Council and NSW Crown Lands have agreed to this approach.
NSW State Emergency Service (SES)	Supported the proposed mitigation measures and project design to avoid nearby creeks. SES also recommended site design measures to minimise risk and consideration of ingress/egress options, noting the possibility of isolation from flooding along major access roads. No further concerns raised.
Heritage Council NSW	Heritage Council NSW provided comments on the Submissions Report. Heritage Council NSW noted there were no heritage items listed on the site, but recommended that a Historic Heritage Management Plan (HHMP) be implemented, including an Unexpected Finds Procedure. After discussing further with Heritage Council NSW, confirming no changes or impacts to identified historic heritage structures were proposed, the Heritage Council NSW agreed that a HHMP was not required.

51. EnergyCo, Transgrid and NSW Resources raised no comments on the project.

4.4 Summary of public submissions

52. During the exhibition period of the EIS, the Department received a total of 137 submissions from the public, of which 128 objected, 5 supported and 4 provided comment on the project.
53. A summary of the proximity of submissions is provided in **Table 5** and links to all submissions are provided in **Appendix D**.

Table 5 | Public submissions received on the EIS

Submitter distance from development footprint	Nature of submissions			Total number of Submissions
	Objections	Comments	Support	
< 5 km	9	1	-	10
5-15 km	1	1	3	5
15-50 km	23	-	1	24
> 50 km	88	2	1	91
Interstate	7	-	-	7
Total	128	4	5	137

54. Local submissions typically focused on potential impacts and matters related to the local community, whereas submitters located at greater distances from the site raised broader concerns around the transition to renewable energy and loss of agricultural land. The key issues raised in public submissions are illustrated in **Figure 5** and included road use and traffic impacts, loss of agricultural land, noise and vibration impacts, land use conflict, community consultation, water supply, fire risk and dust.

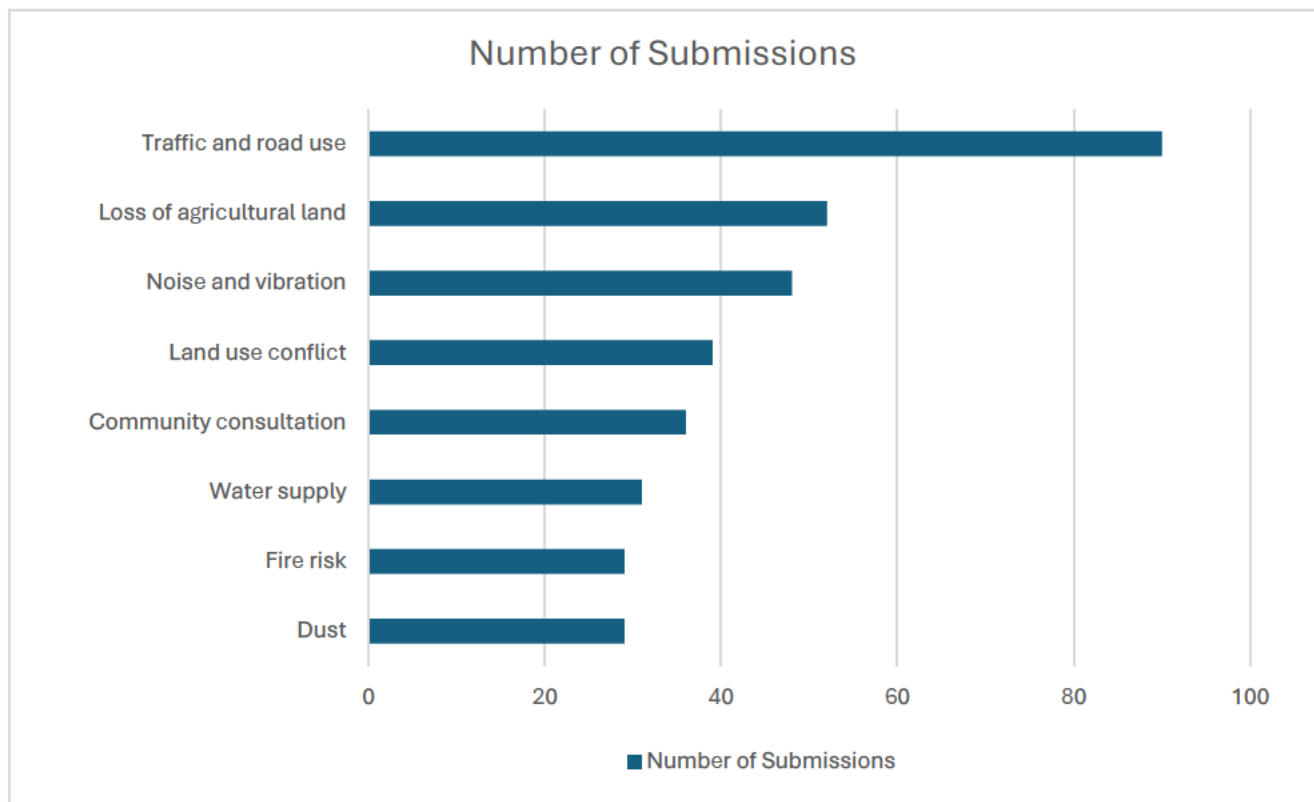


Figure 5 | Key issues raised in public submissions

55. A further breakdown and summary of key issues raised by the public is summarised in **Appendix B. Section 5** of this report provides a summary of the Department's consideration of these matters and recommended conditions.

4.5 Response to submissions

56. Following the public exhibition period, the Department requested Recurrent Energy to respond to the issues raised in submissions and the advice received from government agencies. During the period that followed, Recurrent Energy sought and obtained landowners consent allowing the existing alignment of Spring Mountain Road (which did not align with the road reserve) to be used for vehicular access.
57. Recurrent Energy subsequently provided a Submissions Report to the Department on 13 June 2025, close to two years after submission of its EIS. In response to the public submissions and agency comments, Recurrent Energy adjusted the project layout to avoid habitat fragmentation and reduce impacts to areas of significant biodiversity value, which reduced the development footprint from 651 ha to 525 ha and the disturbance footprint from 729 ha to 612 ha.
58. Recurrent Energy carried out additional and revised technical assessments relating to agriculture, biodiversity, traffic, water supply, contamination, and community engagement.
59. The Department published the Submissions Report on the NSW Major Projects Portal and referred it to relevant government agencies and Council for comment.

5 Assessment

60. The Department has undertaken a comprehensive assessment of the merits of the project. This report provides a detailed discussion of the key assessment matters for the project, namely energy transition (**Section 5.1**), land use compatibility (**Section 5.2**), traffic (**Section 5.3**) and biodiversity (**Section 5.4**).
61. The Department has also assessed the full range of other potential impacts associated with the project in **Section 5.5** and **Table 9**.

5.1 Energy Transition

62. The project aligns with a number of national and State policies (see **Sections 2** and **3** of this report) which identify the need to diversify the energy generation mix and reduce carbon emissions while providing energy security and reliability.
63. With a generating capacity of 360 MW, the project would generate enough electricity to power approximately 144,000 homes. This is consistent with the *NSW Climate Change Policy Framework* of achieving net zero emissions by 2050.
64. The inclusion of a battery (150 MW / 600 MWh) would enable the project to store energy for dispatch to the grid outside of daylight hours and/or during peak demand, increasing grid stability and energy security.
65. The project is located in the New England REZ, which is a declared REZ by the NSW Government. The project would contribute to the continued growth of renewable energy generation and storage capacity in the REZ, with direct access to the transmission network and abundant solar resources.
66. As such, the project would play an important role in increasing renewable energy generation and capacity, firming the grid, and contributing to the transition to a cleaner energy system as coal fired generators are retired.

5.2 Land Use Compatibility

5.2.1 Provisions of the LEP

67. The site is zoned RU1 Primary Production under the Inverell LEP.
68. Under the Transport and Infrastructure SEPP, electricity generating works are permissible with consent on any land in a prescribed non-residential zone, including land zoned RU1 Primary Production.
69. In addition, based on a broader reading of the Inverell LEP, and consideration of the objectives of the RU1 zones and other strategic documents for the region, such as the *New England North West Regional Plan 2041*, the Department considers that there is no clear intention to prevent the development of a solar farm on the site.

70. The project is consistent with the objectives of the RU1 zone by:
- providing diversity in primary industry enterprises and systems appropriate for the area;
 - minimising the fragmentation and alienation of resource lands; and
 - minimising conflict between land uses within the RU1 zone and adjoining zones.

5.2.2 Potential Loss of Agricultural Land

71. The project has a development footprint of approximately 525 ha, the majority of which has been previously used for agricultural purposes. A total of 52 submissions from the public raised concerns about the potential loss of agricultural land arising from the project.

72. The majority of the site is utilised for cattle grazing, with the site generally being used as follows to support this grazing:

- native pasture – covering approximately 87 ha of the development footprint;
- improved pasture – covering approximately 327 ha of the development footprint; and
- fodder crops – covering approximately 185 ha of the development footprint.

Approximately 13 ha is used as a disturbed access road corridor and not used for agricultural purposes.

73. Recurrent Energy undertook a detailed assessment of the impact of the project on the local and regional agricultural industry, in accordance with the Solar Guideline.

74. Recurrent Energy’s assessment concluded that the impacts on agriculture would be temporary and minor in the context of the gross commodity values and land use coverage of the agricultural industries operating within the LGA. The landowner would also be able to continue their agricultural operations within lots surrounding the site throughout the life of the project.

75. The disturbance footprint comprises 484.71 ha of BSAL. With regard to LSC, the *Land and Soil Capability Assessment Scheme* (OEH 2012) (LSC scheme) maps the following results for the disturbance footprint (see **Table 6**):

Table 6 | LSC Classes

LSC Class	Land area	% of disturbance footprint (612 ha)
LSC Class 2 – Very high capability land	3 ha	0.49%
LSC Class 3 – High capability land	303 ha	49.51%
LSC Class 4 – Moderate capability land	209 ha	34.15%
LSC Class 6 – Low capability land	84 ha	13.73%
Excluded from soil mapping (access road corridor)	13 ha	2.12%

76. The inherent agricultural capability of the land would not be affected by the project due to the relatively low scale of the development and Recurrent Energy would be required to return the

land back to existing levels of agricultural capability following decommissioning of the project. Agricultural operations of adjoining landholders would not be impacted.

77. The proposed footprint has been designed to avoid LSC Class 1 land altogether and has a minor impact on LSC Class 2 land (3 ha or 0.49% of the disturbance footprint). The project would occur on 0.3% of land mapped as LSC Classes 3 and 4 within the Inverell Shire LGA, and 0.01% of land mapped as LSC Class 2.
78. During construction and operation, the removal of cattle grazing has an estimated value of up to approximately \$190,000 per annum, which equates to 0.14% of the agricultural productivity value in the Inverell Shire LGA.
79. Regarding potential cumulative impacts, the project's development footprint, combined with the other proposed, approved and/or operational SSD solar farms in the New England North West region, would be approximately 11,569 ha. The loss of 11,569 ha of agricultural land represents a small proportion (0.018%) of the 63 million ha of land currently used for agricultural output in NSW. Given the nature and scale of the established agricultural industries within the region, the project would result in a negligible reduction in the overall agricultural productivity of the region.
80. DPI Agriculture was consulted throughout the assessment of the project. Following review of the Submissions Report and supporting documentation, DPI Agriculture requested further information about the valuation approach, avoidance of LSC Class 2 and 3 land, land use conflicts, and cumulative impacts.
81. In response to this, Recurrent Energy submitted a revised LUCRA and a revised Soil, Land and Agriculture Assessment. Following its review of the revised assessment, DPI Agriculture confirmed that all comments had been addressed, it did not raise any concerns about BSAL land, but maintained its concern over the impact on Class 2 land.
82. However, the Department notes that there is only 3 ha of Class 2 land being impacted, which is fragmented across various parts of the site. Of the 3 ha, 2 ha is occupied by the internal access road which is an existing vehicular track. The remaining 1 ha of Class 2 land comprises fragments at the edge of the disturbance footprint along Kings Creek which are required to be maintained as Asset Protection Zone buffers. The Department therefore considers these impacts are very minor, and these factors must be balanced against the broader benefits of renewable energy development.
83. While the project footprint includes fragmented Class 2 land, it represents a very small area, is primarily occupied by an existing access track, and is located near water courses and not suitable for broadacre cropping. Accordingly, the Department considers that the project would not fragment or alienate any resource lands in the LGA and the site would be returned to usable agricultural land following decommissioning.
84. Importantly, the potential temporary loss of agricultural land in the region must be balanced against:
 - the broader strategic goals of the Australian and NSW governments for the development of renewable energy into the future;

- the environmental benefits of solar energy, particularly with reducing greenhouse gas emissions;
 - the economic benefits of solar energy in an area with good solar resources and proximity to connect to the national electricity market network via the existing 330 kV Armidale to Dumaresq transmission line which traverses the site; and
 - the benefits of dispatchable energy for grid stability and reliability.
85. Based on the above considerations, the Department considers that the proposed solar farm represents an effective and compatible use of the land within the region and that the site is suitable to accommodate the project.

5.2.3 Recommended Conditions

86. The Department has recommended conditions requiring Recurrent Energy to maintain the agricultural capability of the site, including establishing ground cover and maintaining grazing within the site where practicable. Further, Recurrent Energy would be required to fully reinstate the agricultural capability of the land following decommissioning of the project, including the requirement to return the development footprint to its existing land and soil capability.
87. In addition, Recurrent Energy has committed to several mitigation measures to reduce potential impacts and minimise land use conflict, including:
- establishing ground cover of the site within three months following completion of any construction activities;
 - implementation of an Erosion and Sediment Control Plan, Grazing Management Plan, Bushfire Management Plan, and Biodiversity Management Plan (BMP) to address erosion, soil stripping, animal management, biosecurity and pests, and decommissioning and rehabilitation objectives; and
 - appropriate maintenance of infrastructure such as fencing, dams and access tracks.
88. The Department developed the recommended conditions of consent in consultation with DPI Agriculture to ensure all potential impacts on land use compatibility are minimised and that relevant mitigation measures are implemented.
89. With the implementation of the recommended conditions, and Recurrent Energy's proposed mitigation measures, the Department considers that the project would not result in significant land use conflicts.

5.3 Traffic and Transport

5.3.1 Overview

90. During the exhibition period, 90 submissions raised concerns about potential traffic and transport impacts during the construction period.

91. Construction of the project involves delivery of plant, equipment and materials, including movement of heavy vehicles requiring escort, which, primarily during construction, has the potential to impact on the local and regional road network.
92. In response to submissions and advice received from TfNSW and Council, Recurrent Energy amended their Traffic Impact Assessment (TIA) to address the matters raised, informed by consultation with the roads authorities.

5.3.2 Routes and site access

93. Components for the project would be transported from Port of Newcastle. Heavy Vehicles Requiring Escort (HVRE) movements would be limited to four (i.e. four in / four out), associated with the transformer.
94. All vehicles associated with the project would access the site via the intersection of Gwydir Highway and Spring Mountain Road, then to Sturmans Road and into the site (see **Figure 2**).
95. The proposed HVRE route from the Port of Newcastle travels west along the Golden Highway towards Dubbo, proceeds north along the Newell Highway through Coonabarabran to Moree, east along the Gwydir Highway through Inverell, south into Spring Mountain Road, and finally west into Sturmans Road to reach the project site. To facilitate these movements, road works would be necessary at several locations along the route. These locations are identified in the recommended conditions and each road upgrade has in principle support from relevant Councils.
96. Council and TfNSW provided feedback regarding the movement of HVRE through the roundabout at the Gwydir Highway/Campbell Street intersection. Following consultation with both parties, Recurrent Energy provided a design for the roundabout which included temporary placement of steel plates over the traversed part of the roundabout and avoiding damage to the roundabout and the roots of the existing London Plane trees within the roundabout. Once the HVRE movements are completed, the steel plates would be removed, and the road infrastructure would be reinstated to its pre-existing condition.
97. Both TfNSW and Council confirmed the solution was satisfactory.

5.3.3 Traffic volumes

98. The main increase in project related traffic would occur during the approximate 21-month construction period, and particularly during the 14-month peak construction period.
99. During the construction period, the estimated peak daily vehicle movements would be up to 14 shuttle buses, 100 heavy vehicles and 100 light vehicles. Recurrent Energy's traffic study demonstrated there is capacity on the Gwydir Highway to accommodate background and project related traffic, while upgrades to Spring Mountain Road and Sturmans Road will enable the local road network to safely accommodate construction traffic.
100. Construction staff are expected to be primarily accommodated in the nearby centres of Inverell and Glen Innes. As construction activities would be restricted to daytime hours, construction related vehicles would use the local road network during the day only. Heavy

vehicles up to 19 m in length would be used for transporting material and components to the site.

101. Traffic generation during operations would be significantly less than the construction phase, with traffic limited to the two or three FTE jobs expected during operation, with additional vehicles only occasionally required for replacing larger components of project infrastructure.

5.3.4 Road upgrades and maintenance

102. To facilitate access to the site, Recurrent Energy proposes an upgrade to the intersection of Gwydir Highway and Spring Mountain Road to include a Channelised Right Turn (Short) (CHR(s)) and a Basic Left Turn (BAL) treatment, and upgrades (widening) to Spring Mountain Road and Sturmans Road to the site. TfNSW reviewed the strategic designs for the proposed intersection upgrades and confirmed that the design and treatment is appropriate and Council raised no concerns.
103. To facilitate delivery of the transformer to the site, several temporary minor works are proposed on the HVRE haulage route. These proposed road works are based on the swept path analyses undertaken as part of the HVRE assessment and involve temporary removal and reinstatement of road infrastructure to allow 82 m HVRE movements. Recurrent Energy consulted with each of the six councils where road works are proposed, who raised no objections and provided landowners consent to carry out the road works.
104. At the time of EIS lodgement, NSW Crown Lands advised that a permit would be required to enable construction where the intersection impinges on Crown land. However, during the course of assessment, permits have become no longer available for Crown lands use. In response to this, Recurrent Energy proposed that the applicable portions of Crown land along Spring Mountain Road and Sturmans Road would be transferred to Council ownership at the post-approval stage and the transfer would be managed by Recurrent Energy. Both Council and NSW Crown Lands have agreed to and support this approach.

5.3.5 Cumulative impacts

105. As discussed in **Section 2.2**, there are five energy projects within 50 km of the project (three wind farms and two solar farms). Two of these projects are fully operational, one is partially operational and two are yet to commence construction.
106. Projects to be constructed are anticipated to only share common haulage routes on the State road network (i.e. Gwydir Highway). The TIA submitted in support of the project concluded that the State road network, following upgrades at key intersections, has sufficient capacity to accommodate construction traffic of the proposed projects. This conclusion was supported by TfNSW.
107. In the recommended conditions of consent, the Department has included a requirement for a Traffic Management Plan (TMP) to minimise potential cumulative traffic impacts during construction to ensure the intersection upgrade is appropriate.

5.3.6 Recommended conditions

108. Subject to the recommended conditions, the Department, TfNSW and Council are satisfied that the project would not result in significant impacts on road network capacity, efficiency or safety. The Department has recommended conditions of consent requiring Recurrent Energy to:
- undertake relevant road upgrades prior to commencement of pre-construction minor works or construction (whichever comes first);
 - obtain all relevant approvals prior to use of heavy vehicles and heavy vehicles requiring escort on the public road network;
 - restrict the number of vehicles during construction, upgrading and decommissioning to the identified peak volumes;
 - ensure length of vehicles (excluding heavy vehicles requiring escort or high-risk heavy vehicles requiring escort) would not exceed 19 m; and
 - prepare and implement a TMP in consultation with TfNSW and Council, including provisions for dilapidation surveys and operation of shuttle buses, and details of the measures that would be implemented to address road safety.

5.4 Biodiversity

109. The site consists of large areas that have been cleared for grazing and cultivation. Native vegetation (both woodland and grassland form) comprises approximately 30% of the disturbance footprint. Much of the native vegetation mapped is represented by native pastures derived from woodland clearing. The condition of the derived native grassland (DNG) areas is variable and is influenced by disturbance history and current agricultural activities.
110. During the exhibition period, 34 public submissions were received which raised concerns about potential biodiversity impacts arising from the project.
111. A BDAR was prepared for the project in accordance with the BC Act and Biodiversity Assessment Method 2020 (BAM). During the exhibition of the EIS, CPHR raised comments about habitat islands in the development footprint, vegetation mapping, flora surveys, mitigation measures, information inconsistencies, and impacts to Critically Endangered Ecological Community (CEEC) Box Gum Woodland. In response to these comments, an updated BDAR was provided as part of the Submissions Report documentation package, which included a refinement to the site layout, reducing the disturbance area of the project by avoiding some remnant areas of native vegetation.
112. CPHR reviewed the revised BDAR and requested some minor additional information regarding fencing of the project around the solar arrays, which is designed to protect the habitat connectivity values. Recurrent Energy subsequently provided this information and CPHR confirmed that all issues raised regarding the project had been resolved.

5.4.1 Avoidance and mitigation

113. Recurrent Energy has sought to avoid biodiversity impacts through site selection and the avoidance of higher quality native vegetation and habitat, during the preliminary design process. This is consistent with the Solar Guideline's focus on avoiding or minimising impacts during site selection and design in the first instance.
114. Overall, Recurrent Energy has designed the project to avoid and minimise impacts on high quality vegetation and habitat, including:
- project siting to minimise impacts to Box Gum Woodland CEEC, which, following project refinement, have been reduced from approximately 218.97 ha (comprising 2.48 ha of woodland and 216.49 ha of DNG) to 142.35 ha (comprising 3.86 ha of woodland, 1.1 ha of scattered trees in DNG, and 137.4 ha of DNG);
 - avoiding areas surrounding watercourses and roadsides which contain threatened flora species, *Thesium australe* (Austral Toadflax) and *Dichanthium setosum* (Bluegrass);
 - prioritising maintenance of connectivity along watercourses and associated riparian corridors; and
 - avoiding impacts to hollow-bearing trees as much as possible.
115. Recurrent Energy has included a number of mitigation measures to minimise indirect impacts to adjacent vegetation through fencing and implementation of a BMP. The project maintains habitat connectivity throughout areas of retained vegetation, and minimising impacts to species that may migrate between the site and adjacent areas.

5.4.2 Native vegetation

116. The development footprint includes approximately 143 ha of native vegetation, including four plant community types (PCTs), including:
- 0.23 ha of PCT 84 - River Oak – Rough-barked Apple – red gum – box riparian tall woodland (wetland) of the Brigalow Belt South Bioregion and Nandewar Bioregion;
 - 87.32 ha of PCT 510 - Blakely's Red Gum – Yellow Box grassy woodland of the New England Tableland Bioregion;
 - 0.19 ha of PCT 517 - Ribbon Gum – Rough-barked Apple – Yellow Box grassy woodland of the New England Tableland Bioregion and NSW North Coast Bioregion; and
 - 54.84 ha of PCT 590 - White Box grassy woodland on the Inverell basalts mainly in the Nandewar Bioregion.
117. One threatened ecological community, White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and DNG (known as Box Gum Woodland CEEC), is listed as critically endangered under both the BC Act and EPBC Act, and occurs in the development footprint.
118. PCTs 510, 571 and 590 all conform to the BC Act listing for Box Gum Woodland CEEC. A portion of these PCTs also conform to the EPBC Act listing for Box Gum Woodland CEEC.

119. The project would result in the clearing of 142.35 ha of BC Act listed Box Gum Woodland CEEC, including 25.63 ha of EPBC Act listed Box Gum Woodland CEEC. Only 3.86 ha out of this 142.35 ha is woodland, with the vast majority of this comprised of low-quality DNG.
120. **Table 7** provides a summary of the impacts of the project on native vegetation (including threatened ecological communities) and the relevant ecosystem credit liability under the NSW Biodiversity Offset Scheme (NSW BOS).

Table 7 | Ecosystem credit requirements

Plant Community Type	Ecosystem credits required
84 – Rough-barked Apple – red gum – box riparian tall woodland (wetland) of the Brigalow Belt South Bioregion and Nandewar Bioregion	5
510 – Blakely’s Red Gum – Yellow Box grassy woodland of the New England Tableland Bioregion	98
571 – Ribbon Gum – Rough-barked Apple – Yellow Box grassy woodland of the New England Tableland Bioregion and NSW North Coast Bioregion	11
590 – White Box grassy woodland on the Inverell basalts mainly in the Nandewar Bioregion	101
Total	215

5.4.3 Threatened flora and fauna species

121. The project has the potential to affect threatened flora and fauna species listed in the BC Act and EPBC Act through direct habitat loss from vegetation clearing and from indirect impacts.

Ecosystem Credit Species

122. Direct impacts resulting from the development footprint include the loss of habitat for six threatened ecosystem credit species which were recorded within or near the development footprint. No breeding habitat for the Little Eagle, the only dual credit species, was detected during surveys. Potential direct impacts on these species would be offset via the ecosystem credit offsets detailed in **Table 7**.
123. Indirect impacts, including indirect impacts to adjacent vegetation and habitat would be managed through the implementation of accepted best practice measures during construction, implementation of weed and pest management regimes and appropriate fencing.

Species Credit Species

124. Two threatened flora species were recorded during project surveys:
- Bluegrass – listed as vulnerable under the BC Act and EPBC Act; and

- Austral Toadflax - listed as vulnerable under the BC Act and EPBC Act.

125. Species polygons were prepared for both Bluegrass and the Austral Toadflax. No other threatened species were detected during survey or were assumed to be present within the development footprint.
126. **Table 8** details the conservation significance and species credit liability of candidate species which were the subject of targeted threatened species surveys within the development footprint, and require offset.

Table 8 | Credits - Species Credit Species

Species Impacts	Area (ha)	Conservation status		Species credits required
		BC Act	EPBC	
Bluegrass (<i>Dichanthium setosum</i>)	125.94	V	V	673
Austral Toadflax (<i>Thesium australe</i>)	130.58	V	V	521
Total				1,194

5.4.4 Serious and irreversible impacts (SAII)

127. Under clause 6.7 of the BC Regulation, an impact is to be regarded as serious and irreversible if it is “likely to contribute significantly to the risk of a threatened species or ecological community becoming extinct”.
128. The Department has considered Principle 1 (a rapid rate of decline) and Principle 2 (a very small population size) for determining SAII in its assessment, as set out in clause 6.7 of the BC Regulation, including the Guidance to assist a decision-maker to determine a serious and irreversible impact.
129. The project would impact up to 142.35 ha of Box Gum Woodland CEEC. Box Gum Woodland CEEC is listed as critically endangered under both the BC Act and the EPBC Act, and is included in the current list of entities at risk of SAII under Principles 1 and 2 of the BC Regulation.
130. During site selection, Recurrent Energy prioritised the development footprint in the study area to avoid and minimise areas which conform to Box Gum Woodland CEEC.
131. At the EIS stage, the project proposed the clearing 2.48 ha of woodland and 216.49 ha of DNG of Box Gum Woodland CEEC. CPHR advice acknowledged and commended the initial efforts of Recurrent Energy to avoid and minimise impacts to Box Gum Woodland CEEC.
132. However, CPHR recommended further avoidance and minimisation measures to reduce impacts to Box Gum Woodland CEEC. The advice noted that there were further opportunities to avoid and minimise impacts in the project design.
133. Through the response to submissions process, Recurrent Energy revised the development footprint to avoid certain areas of higher quality Box Gum Woodland, reducing the

development footprint by 126 ha, from 651 ha to 525 ha, resulting in a further 76.62 ha of Box Gum Woodland CEEC being excluded from the development footprint.

134. Upon review of the Submissions Report and updated BDAR, CPHR confirmed no further comments in relation to Box Gum Woodland CEEC.
135. Overall, the project proposes to clear 142.35 ha of Box Gum Woodland CEEC, most of which is low quality DNG. The BDAR identifies that following this clearance, there is a remaining extent of 1,520 ha of Box Gum Woodland within the buffer area (being land within a 1,500 m buffer zone from the development footprint encompassing the solar farm and BESS, and 500 m buffer zone from the development footprint encompassing the access road from Gwydir Highway), in accordance with the BAM.
136. The current geographical extent of Box Gum Woodland in NSW is 702,800 km² or 70.28 million ha. The project would therefore impact 0.0002% of its current extent in NSW.
137. The Department considers that it would be very difficult to conclude that an impact of approximately 0.0002% is likely to contribute significantly to the extinction of Box Gum Woodland. Additionally, CPHR's review of the revised BDAR raised no concerns about the project's impact on Box Gum Woodland.
138. The Department's assessment concludes that the impacts of the project on SAI entities can be adequately minimised through the required offsets and would not result in serious and irreversible impacts.

5.4.5 Significant impacts on Commonwealth-listed species and communities

139. The project was confirmed to be a controlled action by AG DCCEEW on 29 August 2022 pursuant to section 75 of the EPBC Act (EPBC 2022/09249). Recurrent Energy identified and assessed all threatened species and communities included in the Commonwealth Referral Decision.
140. Assessments of significance were undertaken for relevant threatened species, including Box Gum Woodland CEEC, Blue Grass, Austral Toadflax, Regent Honeyeater, Swift Parrot, and Painted Honeyeater.
141. The assessments of significance concluded that the project is likely to have a significant impact on Box Gum Woodland CEEC, Blue Grass and the Austral Toadflax, and concluded that impacts to the species would be adequately offset through meeting the biodiversity offset obligation established under the NSW BOS.
142. CPHR conducted a review of the MNES relating to the project and concluded that the MNES assessment for the project accords with the Bilateral Agreement between the AG DCCEEW and NSW made under section 45 of the EPBC Act.
143. The Department considered Commonwealth matters in consultation with CPHR and the AG DCCEEW, including Recurrent Energy's assessments of significance. AG DCCEEW provided feedback on the assessment package which has been adopted.
144. A summary of this assessment is provided in Appendix I.

5.4.6 Recommended conditions

145. The Department has recommended that Recurrent Energy retire the ecosystem and species credits identified in **Table 7** and **Table 8** in accordance with the NSW BOS prior to carrying out any development that could directly or indirectly impact biodiversity values.
146. The Department has recommended conditions requiring Recurrent Energy to:
- avoid the disturbance of native vegetation or fauna habitat located outside the development footprint;
 - retire the biodiversity credits in accordance with the credit liability prior to impact;
 - prepare and implement a BMP in consultation with CPHR, including measures to:
 - minimise clearing and avoiding unnecessary disturbance of vegetation that is associated with the construction and operation of the project;
 - minimise the impacts of the development on threatened flora and fauna species located within the development footprint;
 - implement fauna management protocols;
 - rehabilitate and revegetate temporary disturbance areas and maximise the salvage of resources within the approved disturbance area for beneficial reuse (such as fauna habitat enhancement) during the rehabilitation and restoration of the project;
 - prepare and implement an incidental threatened species finds protocol to avoid and/or minimise and/or offset options to be implemented if additional threatened species are discovered on the site;
 - control weeds, feral pests and pathogens; and
 - provide a detailed program to monitor and report on the effectiveness of these measures.
147. With these measures, CPHR has advised that all issues raised during assessment have been adequately addressed. Accordingly, the Department considers that the project appropriately minimises impacts to biodiversity values through project design and appropriate mitigation measures and, subject to the implementation of the recommended conditions of consent, would not result in significant impacts on biodiversity values, including no serious or irreversible impacts.

5.5 Other issues

The Department’s consideration of other issues is provided in **Table 9** below.

Table 9 | Assessment of other issues

Issue	Recommended conditions
<p>Visual impact</p> <ul style="list-style-type: none"> • Seven submissions were received during the EIS exhibition period that raised concerns about potential visual impacts. These included potential impacts on the visual landscape and scenic quality of the region, as well as potential glint and glare impacts. • Recurrent Energy provided a Visual Impact Assessment (VIA) with the EIS, which included eight representative viewpoints surrounding the site. Additionally, the Department conducted a site visit in August 2025 to inspect the site and its surrounds. • The project is located in a sparsely populated rural area away from residences, with the closest non-associated receiver (R1) located approximately 2.1 km from the solar farm. • At the time of EIS lodgement (July 2023), the August 2022 version of the Solar Guideline Technical Supplement - Landscape and Visual Impact Assessment (Technical Supplement) was applicable to the project. Recurrent Energy’s VIA was therefore undertaken in accordance with this version of the Technical Supplement, being the relevant guide at the time of lodgement. • All viewpoints were deemed to experience a “slight” or “negligible” visual impact, due to distance and the potential views of the project infrastructure being obstructed by undulating topography, existing vegetation, and nearby building structures. No viewpoints, public or private, were assessed as having a moderate or above impact. • Public submissions highlighted that the rural landscape is valued by the community for its scenic character. The land uses within and surrounding the site are primarily agricultural. Additionally, the undulating topography and existing vegetation would minimise views of the project from the surrounding area. Impacts on the local landscape have also been reduced through project design, 	<ul style="list-style-type: none"> • The Department has recommended conditions of consent that require Recurrent Energy to: <ul style="list-style-type: none"> – minimise the off-site visual impacts of the project, including the potential for any glare or reflection; – ensure the visual appearance of all ancillary infrastructure (including paint colours) blends in as far as reasonable and feasible into the surrounding landscape; and – install external lighting as low intensity lighting in accordance with Australian Standard AS/NZS 4282:2019 – Control of the Obtrusive Effects of Outdoor Lighting.

Issue	Recommended conditions
<p>including a reduction in the development footprint. The project would therefore have a limited visual impact on the landscape beyond the project's immediate vicinity.</p> <ul style="list-style-type: none"> • Having considered the assessment provided in the VIA and inspected the site, the Department is satisfied that visual impacts are minimal and can be mitigated. <p><u>Glare</u></p> <ul style="list-style-type: none"> • A glint and glare assessment formed part of the VIA that accompanied the EIS, and was supported by supplementary information provided during assessment in accordance with the glint and glare assessment requirements in the Solar Guideline. Of the residential viewpoints within 3 km of the proposed solar arrays, none are expected to have a direct line of sight to trigger glint and glare impacts. • Additionally, the Solar Guideline requires that roads within 1 km of the proposed solar arrays must be assessed for potential glint and glare impacts. There is a 150 m section of Sturmans Road that is located within 1 km of the propose solar arrays, however glint and glare would not be geometrically possible for westbound motorists due to the orientation of the panels and eastbound motorists would be facing the opposite direction away from the panels. • Any potential reflections would be low intensity, intermittent, and limited in duration due to panel orientation and landscape screening. No concerns were raised by TfNSW or Council (as the roads authorities) in relation to glint and glare. • The site is not located near any major airports or known flight paths. The potential reflectivity and glare impacts arising from the project would be negligible and would not create hazardous glare for residents, motorists or aircraft. • Subject to the recommended conditions, the Department is satisfied that the project would not result in significant visual or glare impacts. 	

Issue	Recommended conditions
Noise and vibration	
<ul style="list-style-type: none"> • During the EIS exhibition, 48 submissions were received about potential noise impacts arising from the project. • A Noise and Vibration Impact Assessment (NVIA) was prepared to accompany the EIS, and a noise impact addendum was provided as part of the Submissions Report. • Construction noise levels are expected to exceed the noise management level (NML) at receiver locations R11 (5 dB(A)), R12 (1 dB(A)) and R14 (9 dB(A)) for a temporary period of two weeks during the Stage 1 access road widening works. • Notwithstanding the above, all receiver locations are predicted to comply with the EPA’s highly noise affected level of 75 dB(A). • Construction vibration impacts are expected to arise from the access road widening works at one non-associated receiver (R14). R14 is located 50 m from the closest construction activities and is therefore beyond the distance criteria that would cause cosmetic damage to buildings. However, the vibration impacts of the road works are within 100 m of R14, and therefore have the potential to impact human comfort at R14. To mitigate these impacts, Recurrent Energy proposes to offer the following measures: <ul style="list-style-type: none"> – advanced warning of disruptive works via letterbox drop or equivalent a minimum of five working days prior to the start of works; – verification of predicted noise/vibration level where works last for more than three weeks; and – respite periods where works are carried out in blocks to accommodate the amenity of residents at R14. Each continuous block is to last a maximum of three hours, with a minimum respite period of one hour. • Recurrent Energy’s NVIA identified that there would be no noise or vibrational exceedances at any receiver locations during operation or decommissioning. 	<ul style="list-style-type: none"> • Minimise noise generated by the construction, upgrading or decommissioning activities on site in accordance with the <i>Interim Construction Noise Guideline</i> (DECC, 2009). • Comply with the noise management levels as derived from the <i>NSW Noise Policy for Industry</i> (EPA, 2017) at any non-associated residence. • Comply with safe working distances for vibration generating equipment from sensitive receivers as required by the <i>NSW Construction Noise and Vibration Guideline</i>. • Restriction of construction hours to: <ul style="list-style-type: none"> – Monday to Friday: 7:00 am to 6:00 pm; and – Saturday: 8:00 am to 1:00 pm.

Issue	Recommended conditions
<ul style="list-style-type: none"> • Road traffic noise during construction and operation along the Gwydir Highway, Spring Mountain Road and Sturmans Road would comply with the relevant criteria in the EPA's Road Noise Policy (RNP). • The Department considers that noise generated during construction, operation, and decommissioning of the project can be appropriately managed through implementation of the proposed mitigation measures and adherence to the recommended conditions of consent. 	
Dust	
<ul style="list-style-type: none"> • During EIS exhibition, 33 submissions raised concerns regarding dust and air pollution impacts associated with the construction of the project. • The primary source of dust from the project would occur due to earthworks/excavation and vehicle movements on unsealed roads. These works have the potential to adversely impact on local air quality, particularly for the receivers located closest to these works. • Recurrent Energy has committed to the following dust suppression measures during construction: <ul style="list-style-type: none"> – use of a water cart on unsealed areas, as required; – restriction of traffic speeds on the internal access road; – sealing a 150 m section of Spring Mountain Road nearest to receiver R14 (as agreed with Council); – a commitment to ensure disturbed areas are revegetated/covered as soon as practicable; – requirement to ensure vehicle loads are secured; – dust suppression measures would take into consideration weather conditions; and – stabilise pavements with polymer, cement or similar, on internal access roads, where practicable. • The Department considers that dust generated during construction of the project could be appropriately managed through implementation of the proposed mitigation measures and adherence to the recommended conditions of consent. 	<ul style="list-style-type: none"> • Minimise dust generated by the project.

Issue	Recommended conditions
Water	
<p><u>Flooding</u></p> <ul style="list-style-type: none"> The project is located in the southern headwaters of the Border Rivers catchment in northern NSW, which forms part of the greater Murray-Darling Basin. The development footprint has been designed to largely avoid the 1% Annual Exceedance Probability (AEP) flood extent area, with minor encroachments limited to several isolated locations of solar arrays where shallow and low hazard flooding may occur up to the 1% AEP event. Additional overland flow is expected between Kateys Creek and Jessie Creek, discharging to Kings Creek, but hazards here remain low (H1) even in Probably Maximum Flood (PMF) events. Overall, the risk of adverse flooding impacts within or downstream of the development footprint is considered low for events up to 1% AEP. No concerns about flooding were raised by NSW DCCEEW Water Group, SES, Water NSW, or Council. The Department therefore considers that the potential for flooding risk arising from the project is negligible. <p><u>Water supply and demand</u></p> <ul style="list-style-type: none"> During the EIS exhibition, 31 submissions raised concerns regarding project water requirements and supply arrangements. The project would require 75 megalitres (ML) of water over the 21-month construction period for dust suppression, which would also be used for site amenities, fire protection and washing of equipment and plant. The project would require 475 kilolitres (KL) of water per annum during operation, most of which would be allocated for cleaning of solar panels, with remaining water being allocated to other maintenance activities, including fire protection and washing of equipment. To satisfy these water requirements, the project proposes to use a Council owned standpipe to supply approximately 50% of construction water needs (which Council has agreed to), and the existing on- 	<ul style="list-style-type: none"> Prepare and implement a Soil and Water Management Plan in consultation with NSW DCCEEW Water Group prior to the commencement of construction. Ensure all works undertaken near waterfront land are done in accordance with <i>Guidelines for Controlled Activities on Waterfront Land</i> (NRAR, 2018). Prepare and implement a Flood Emergency Response Plan (FERP). Ensure the project is designed, constructed and maintained to reduce impacts on water resources and does not alter hydrology off site. Implement erosion and sediment control measures in accordance with best practice comprising <i>Managing Urban Stormwater: Soils and Construction – Volume 1</i> (Landcom 2004) and <i>Best Practice Erosion and Sediment Control</i> (IECA 2008).

Issue	Recommended conditions
<p>site bore for the remaining 50% (under a Miscellaneous Works Application to change the bore use from domestic/stock to commercial). Both Water NSW and NSW DCCEE Water Group have been consulted and are satisfied with this approach.</p> <ul style="list-style-type: none"> • The Department therefore considers that the project would not result in any adverse impacts on water demand in the locality. <p><u>Erosion and sediment control</u></p> <ul style="list-style-type: none"> • Most of the site is considered low erosion risk due to the presence of low slopes (up to 11.5–14%) and a small portion of the site, associated with water courses, is considered to be high erosion risk due to the presence of steep slopes (steeper than 11.5–14%). • The greatest risk to erosion is likely to arise during construction. • Recurrent Energy’s erosion assessment concluded that any erosion hazards and risks can be adequately managed and mitigated through the following measures: <ul style="list-style-type: none"> – maintaining sheet flow, proper drainage, and low flow velocities; – avoiding or treating dispersive and saturated soils; – installing appropriate sediment basins and controls; – diverting clean water away from disturbed areas and using energy dissipaters; – revegetating exposed areas and maintaining groundcover; – scheduling earthworks outside wet periods and applying covers when needed; and – regularly monitoring all erosion and sediment controls. • With the implementation of the appropriate mitigation measures, including a Sediment and Erosion Control Plan, and recommended conditions, the Department considers that the project would not result in unacceptable risk of sediment erosion. 	

Issue	Recommended conditions
<p>Bushfire risk</p> <ul style="list-style-type: none"> • During the EIS exhibition, 29 submissions raised concerns about potential bushfire risk. • The project site is identified as bushfire prone land within the Northern Tablelands Bush Fire Management Committee region. Recurrent Energy prepared a Bushfire Risk Assessment (BRA) to assess the bushfire threat to and from the project and identify protection measures to address those risks. • Recurrent Energy has committed to mitigating bushfire risk by: <ul style="list-style-type: none"> – establishing a 10 m Asset Protection Zone (APZ) around critical infrastructure and complying with <i>Planning for Bushfire Protection 2019</i> (PBP 2019) and standards for APZs; – preparing a Bushfire Management Plan, FSS, and Emergency Response Plan (ERP) as per FRNSW's recommendations; and – ensuring adequate water supply, including static tanks at access points and mobile firefighting resources. • The Department consulted with RFS and FRNSW throughout the assessment and in preparing the conditions of consent, who advised that the BRA addressed the requirements of PBP 2019, and raised no objection to the project subject to the recommendations identified in the BRA being implemented, which Recurrent Energy has committed to. • The Department considers that the fire risks for the project can be managed, subject to the recommended conditions of consent, including preparation of a FSS and ERP to ensure all operational requirements are met and appropriate management measures are in place, consistent with the recommendations of RFS and FRNSW. 	<ul style="list-style-type: none"> • The BESS must not exceed the proposed total capacity of 150 MW. • Prepare a FSS and an ERP for the project. • Ensure the project complies with the relevant asset protection requirements in the RFS's PBP 2019 and <i>Standards for APZs</i>.

Issue	Recommended conditions
Hazards and contamination	
<p><u>Hazards</u></p> <ul style="list-style-type: none"> • Recurrent energy prepared a Preliminary Hazards Analysis (PHA) in accordance with <i>State Environmental Planning Policy (Resilience and Hazards) 2021</i> (Resilience and Hazards SEPP). The PHA provided recommendations for appropriate BESS separation distances, including in relation to radiant heat, overpressure, toxic release and electromagnetic fields. • Following review of the EIS and the PHA, the Department considers that: <ul style="list-style-type: none"> – dangerous goods stored on-site would unlikely exceed the threshold limits in Hazardous and Offensive Development Application Guidelines – Applying SEPP 33; – the project is not “potentially hazardous” as per the Resilience and Hazards SEPP relating to the storage of dangerous goods; and – the project meets the qualitative risk criteria outlined in the Department’s Hazardous Industry Planning Advisory Paper No. 4 “Risk Criteria for Land Use Safety Planning”. • The Department is satisfied that all avoidable risks have been avoided and the risks from a major hazard have been reduced by separation to nearby residents and existing high risk installations. • Subject to the recommended conditions and implementation of the management measures committed to by Recurrent Energy, the Department considers that the risks associated with the project can be adequately managed. <p><u>Contamination</u></p> <ul style="list-style-type: none"> • During the EIS exhibition, 32 public submissions were received which raised concern about potential contamination. • The Department considered the contaminated land provisions of the Resilience and Hazards SEPP and requested that Recurrent Energy prepare a Preliminary Site Investigation (PSI) into potential contamination across the site. Recurrent Energy provided a PSI which involved a site inspection by a 	<ul style="list-style-type: none"> • All chemicals, fuels and oils to be stored in accordance with Australian Standards and EPA requirements. • Prepare an Unexpected Finds Procedure for contamination prior to commencing construction.

Issue	Recommended conditions
<p>suitably qualified and experienced contaminated land consultant to identify potential sources of contamination.</p> <ul style="list-style-type: none"> • The PSI found potential moderate and low contamination risks based on historical land use practices such as use of farm machinery and fuel/chemical storage, which were considered typical of the site setting. • The PSI recommended management measures for making the site suitable for the proposed solar farm, including targeted sampling to inform remediation measures to be included in a construction environment management plan (CEMP). • The PSI also recommended an unexpected finds protocol, should contamination be encountered on the site. Recurrent Energy has committed to implement an unexpected finds protocol to manage any contamination that may be uncovered during earthworks across the site. • Noting the outcomes of the PSI and the proposed mitigation measures, the Department considers that the proposed use of the land is not intensive and is low risk even if historical contamination is identified, noting that during operations only a very small number of people would be required to access the site on a regular basis. • Regarding the possible contamination of the site from the solar farm itself, the Department's Frequently Asked Questions Large Scale Solar Guideline document outlines that the use of metals in solar panels has not been found to pose a risk to the environment as they are enclosed in thin layers between sheets of glass or plastic within the solar panel. To readily release contaminants into the environment, solar panels would need to be ground to a fine dust. As such, contamination of soil resulting from the project is not expected. • Accordingly, the Department considers that the site is suitable for the proposed development and that the proposed mitigation measures are sufficient to minimise contamination risk. 	
<p>Aboriginal cultural heritage</p>	
<ul style="list-style-type: none"> • A search of the AHIMS database in May 2021 identified no Aboriginal heritage sites listed within the project area. 	<ul style="list-style-type: none"> • Ensure the development does not cause any direct or indirect impacts on

Issue	Recommended conditions
<ul style="list-style-type: none"> • An archaeological survey was conducted in September 2021 with Registered Aboriginal Parties (RAPs). • Surveys identified 36 sites, comprising of artefact scatters, isolated finds and scarred trees, which were registered within the AHIMS database. Test excavations were undertaken to obtain further information about two Potential Archaeological Deposits (PADs) within the survey area. • The majority of the sites identified were stone artefacts, including artefacts scatters and individual finds. There were also nine scarred trees, two PADs, and ochre resources identified at some sites. The RAPs stressed the importance of the ochre resources and two particular scarred trees as culturally important. • Through the EIS development process, the project layout was refined to avoid 26 of the 36 sites, including all of the scar trees and ochre resources. The 10 sites which would be impacted are all isolated stone artefacts or low density artefact scatters. Of the 10 sites, 8 are of low scientific and cultural significance, while 2 (SSF-OS10 and SSF-OS12) are of moderate scientific and cultural significance. • Prior to the commencement of construction, the 10 impacted sites would be salvaged in accordance with a Heritage Management Plan (HMP) that would be prepared in consultation with RAPs and reviewed by HNSW. This approach was supported by RAPs and HNSW. • The HMP would also include an unexpected finds procedure which would be followed should any Aboriginal artefacts or skeletal material be identified during construction. • HNSW provided comment during exhibition requesting further clarification of some matters within the heritage assessment, which Recurrent Energy provided in the Submissions Report. HNSW confirmed that the information adequately addressed its comments and provided recommended conditions of consent for the project, which were incorporated into the recommended conditions of consent. • On this basis, and with the implementation of these measures, the Department considers that the project is unlikely to result in significant impacts on the Aboriginal heritage values of the locality. 	<p>any items located within exclusion zones or outside the approved development footprint.</p> <ul style="list-style-type: none"> • Salvage and relocate Aboriginal artefacts in consultation with RAPs. • Prepare and implement a Heritage Management Plan.

Issue	Recommended conditions
<p>Historic heritage</p> <ul style="list-style-type: none"> • No heritage items listed on national, State or local registers are located within or surrounding the site. • Site inspections identified four unlisted potential heritage sites within the development footprint, which include a rubbish pit, a shearing shed, a sheep dip and an unidentified structure. A historic heritage assessment was provided which identified that none of these sites meet the threshold for being listed as items of local heritage significance within the Inverell LEP. • The assessment proposed mitigation measures which include archivally recording some of the sites prior to being disturbed by the project, and the implementation of a HMP, which the Department has included in the recommended conditions of consent. Council raised no concerns with the historic heritage impacts of the proposal. • The Department considers that the project would not have any adverse impacts on any listed items of historic heritage significance. 	<ul style="list-style-type: none"> • Prepare a HMP that includes a contingency plan if previously unidentified heritage items are found.
<p>Waste</p> <ul style="list-style-type: none"> • The project would produce a number of waste streams during construction and decommissioning. The operational phase of the project would result in minimal waste. • All waste generated would be managed in accordance with the <i>Protection of the Environment Operations Act 1979</i> and the <i>Waste Avoidance and Resource Recovery Act 2001</i>. Hazardous waste, such as septic wastewater, would be collected by a licenced waste contractor for disposal at a licenced facility. • Appropriate waste minimisation and mitigation measures have been identified to mitigate the waste impacts arising from the project. To minimise waste generation during decommissioning and maintenance, Recurrent Energy would recover and recycle all dismantled and decommissioned infrastructure and equipment as much as possible. Metal components such as steel piles and copper would be segregated for recycling, while remaining materials that cannot be recycled would be disposed of at an appropriately licensed waste management facility. 	<ul style="list-style-type: none"> • Minimise waste generated by the project, classify and store waste according to appropriate guidelines. • Prepare a WMP.

Issue	Recommended conditions
<ul style="list-style-type: none"> • Council was consulted for comment during the assessment process, where it was confirmed that the Inverell Waste Depot on Burtenshaw Road has limited capacity and its ability to accept waste from the project would depend on the type and volume of waste. Council requested that a waste management plan (WMP) be prepared in consultation with Council to ensure waste generated by the project is able to be managed safely and in accordance with Council and State standards. The Department has included the need to develop a WMP in the recommended conditions of consent. • The Department has recommended conditions of consent requiring Recurrent Energy to reduce waste, recycle where possible, and to dispose of unrecyclable waste at a licenced waste facility. Accordingly, the Department considers that the waste generated by the project would be appropriately managed. 	
Community benefits	
<ul style="list-style-type: none"> • In addition to its contribution to Australia’s renewable energy transition, the project would generate direct and indirect benefits to the local community, including: <ul style="list-style-type: none"> – up to 400 (FTE) construction workers (at peak); – expenditure on accommodation and business in the local economy by workers who would reside in the locality; and – procurement of goods and services by Recurrent Energy and associated contractors. • Recurrent Energy has reached an in-principle agreement with Council to enter into a VPA which is consistent with the amount described in the Department’s Benefit Sharing Guideline (including \$850 per MW per annum) and the timing identified in Council’s <i>Renewable Energy – Community Benefit Sharing Framework Policy</i>. • The terms of the VPA would include the establishment of a community benefit fund which would allocate funds annually for community-based projects, to be managed through a committee comprising representatives from Recurrent Energy, Council, and the local community. • Accordingly, the Department considers the project would result in positive community benefits. 	<ul style="list-style-type: none"> • Execution of a VPA as agreed with Council.

Issue	Recommended conditions
<p>Workforce accommodation</p> <ul style="list-style-type: none"> • The project is expected to generate an average of 200 FTE jobs during construction, with an estimated 400 workers during peak construction (Stage 2) over a period of 14 months. • Noting construction staff would require short term accommodation in both Inverell and Glen Innes, Recurrent Energy consulted with Inverell Shire Council and Glen Innes Severn Council regarding existing accommodation supply, availability and challenges. Recurrent Energy has proposed to develop an Accommodation and Employment Strategy in consultation with both Councils, post approval. • The Department consulted closely with both councils throughout the assessment process to understand their position on workforce accommodation in the region for this project. • Importantly, Recurrent Energy has worked closely with Glen Innes Severn Council on Council and private residential projects which would initially be used during construction and would then provide long-term accommodation, which, would leave a legacy benefit to the community. • Both Inverell and Glen Innes Severn Councils have provided their support for the preparation of an accommodation strategy post approval, subject to the strategy being prepared in consultation with each Council prior to the commencement of construction works. • With the implementation of an Accommodation and Employment Strategy (AES), potential impacts on housing and short-term accommodation availability could be appropriately managed. Both Inverell Shire Council and Glen Innes Severn Council confirmed their satisfaction with this approach, provided the strategy was completed with their involvement, prior to commencement of construction works. 	<ul style="list-style-type: none"> • Prepare an AES for the project in consultation with Inverell Shire Council and Glen Innes Severn Council, with consideration to prioritising the employment of local workers.
<p>Decommission and rehabilitation</p> <ul style="list-style-type: none"> • The anticipated operational life of the project is approximately 35 years. However, there is potential for this to be extended if the infrastructure is repaired and upgraded, as permitted under the recommended conditions of consent. 	<ul style="list-style-type: none"> • Requirements for the site to be rehabilitated within 18 months of cessation of operations.

Issue	Recommended conditions
<ul style="list-style-type: none"> • The Solar Guideline identifies four key decommissioning and rehabilitation principles for circumstances where an applicant ceases operating a project, which are: the removal of project infrastructure; returning the land to its pre-existing use; including rehabilitating and restoring the pre-existing LSC Class where previously used for agricultural purposes; and the owner/operator of the project should be responsible for the decommissioning and rehabilitation and that this should be reflected in an agreement with the host landowner(s). • With the implementation of objective-based conditions and monitoring requirements, which are consistent with these key principles, the Department considers that the solar farm would be suitably decommissioned at the end of the project life, or within 18 months if operations cease unexpectedly, and that the site be appropriately rehabilitated. 	
Cumulative impacts	
<ul style="list-style-type: none"> • An assessment has been completed against the <i>Cumulative Impact Assessment Guidelines for State Significant Projects</i>. Potential cumulative impacts have been identified with nearby projects including White Rock Wind Farm (Stages 1 and 2), White Rock Solar Farm, Sapphire Wind Farm, Sapphire Solar Farm, and Glen Innes Wind Farm. • Recurrent Energy’s cumulative impact assessment found that the project is expected to have no significant cumulative impacts. Whilst the project would occupy land currently used for agricultural purposes, its agricultural production value is approximately 0.14% of Inverell LGA’s annual production value and therefore the cumulative agricultural impacts are minimal, temporary, and reversible, with potential for dual land use and full rehabilitation after decommissioning. • Traffic, noise, and hazard risks are low and manageable through existing infrastructure, scheduling, and standard mitigation measures. Biodiversity impacts are limited and would be offset in accordance with legislation. Aboriginal heritage impacts would be minor and would be managed through avoidance and artefact collection. Visual impacts would be low, with only minor cumulative effects at one viewpoint with White Rock Solar Farm and Sapphire Solar Farm during their respective operational stages. Bushfire risks would be minimised through a dedicated management plan. 	<ul style="list-style-type: none"> • Prepare an AES for the project in consultation with Inverell Shire Council and Glen Innes Severn Council. • Prepare a TMP in consultation with TfNSW, Inverell Shire Council and Glen Innes Severn Council.

Issue	Recommended conditions
<ul style="list-style-type: none"> • In addition, the relative distance of each project from one another, as well as the staggered construction timelines, largely negates the potential cumulative impacts. • The Department has recommended conditions of consent that require consideration of potential cumulative impacts, including the requirement to prepare an AES in consultation with Inverell Shire Council and Glen Innes Severn Council, and a TMP in consultation with both councils and TfNSW. • Subject to the implementation of the recommended conditions, the Department is satisfied that the project has been designed to minimise potential cumulative impacts. 	
<p>Land value</p>	
<ul style="list-style-type: none"> • Three submissions received during the public exhibition period raised concerns about potential impacts on local property values. • The Department considers the project would not result in any significant or widespread reduction in land values in areas surrounding the project. • The Department notes that: <ul style="list-style-type: none"> – the proposed land that is permissible with consent in the RU1 Primary Production zone (a “prescribed zone”) pursuant to clause 2.36 of the Transport and Infrastructure SEPP; – a detailed assessment of the merits of the project has found that the project is unlikely to generate significant economic, environmental, or social impacts; – the visual impacts of the project on the surrounding receivers and road users would be minor and not significant; and – the NSW Land and Environment Court (LEC) has ruled on several occasions that the assessment of the impacts of projects on individual property values is not generally a relevant consideration under the provision of the EP&A Act, unless the project would have significant and widespread economic impacts on the locality, which is not the case in this instance. 	<p>No specific condition required.</p>

Issue	Recommended conditions
Insurance	
<ul style="list-style-type: none"> • Two public submissions received during the exhibition period raised concerns regarding increased insurance costs. • The Insurance Council of Australia is not aware of any instances where Insurance Council Members have been unable to provide insurance or have increased premiums due to a nearby property hosting energy infrastructure. 	<p>No specific condition required.</p>

6 Evaluation

148. The Department has assessed the development application, EIS, Submissions Report, and additional supporting documents provided by Recurrent Energy and has carefully considered:
- submissions received from members of the community;
 - comments provided by councils; and
 - advice received from relevant government agencies.
149. The Department has considered the objectives of the EP&A Act, including the ESD principles, and relevant considerations under section 4.15 of the EP&A Act. The Department has also given consideration to Recurrent Energy's evaluation of the project's merit against applicable statutory and strategic planning requirements.
150. The site is located on land zoned RU1 Primary Production, in which electricity generating works are a permissible land use under the Transport and Infrastructure SEPP. The project would include connection to the National Electricity Market via the existing 330 kV Armidale to Dumaresq transmission line which traverses the site. The project also includes a series of road upgrades to accommodate the HVRE movements travelling from port to site.
151. The project has been designed to utilise topography and minimise impacts to existing vegetation in and around the site, whilst also largely avoiding key constraints, including amenity impacts to non-associated residences, watercourses, and Aboriginal heritage sites. Any residual impacts would be relatively minor and can be managed through the recommended conditions of consent. The project would not result in any significant reduction in the overall agricultural productivity of the region. Following decommissioning, the site would be rehabilitated to ensure its capability of returning to agricultural land.
152. There would be no significant visual impacts to surrounding residential dwellings, public viewpoints, or the surrounding landscape, and there would be no significant glint and glare impacts resulting from the installation of the solar arrays.
153. The Department considered the submissions made during the exhibition of the project and the issues raised by the community, councils and agencies during consultation, including fire safety, land use, traffic, and visual impacts. These matters have been addressed through project refinements and the recommended conditions of consent.
154. The site is located in the New England REZ, which is aimed at encouraging investment in electricity infrastructure and unlocking additional generation capacity in order to ensure secure and reliable energy in NSW.
155. Importantly, the project would assist in transitioning the electricity sector from coal and gas fired power stations to low emissions sources and is therefore consistent with the goals of the *Climate Change Policy Framework* and the *Net Zero Plan Stage 1: 2020-2030*. The project would have a generating capacity of 360 MW of clean electricity, which is enough to power approximately 144,000 households. Additionally, the battery storage component of the project

has a capacity of 150 MW / 600 MWh to dispatch energy to the grid during periods of low generation.

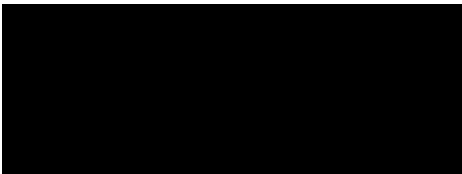
156. The project achieves an appropriate balance between maximising the efficiency of the solar resource development and minimising the potential impacts on surrounding land users and the natural environment. Through job creation and capital investment facilitated by a planning agreement with Council in accordance with the Department's Benefit Sharing Guideline, the project would also stimulate the local economy and provide flow-on benefits to the local community.
157. On balance, the Department considers that the project is in the public interest and is approvable, subject to the recommended conditions of consent (see **Appendix F**).
158. This assessment report is hereby presented to the Commission to determine the application.

Prepared by:

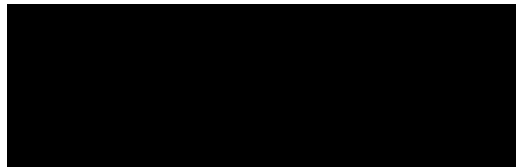
Kirsty Vogel, Senior Environmental Assessment Officer

Andrew McIntyre, Principal Planning Officer

Recommended by:



Iwan Davies
Director
Energy Assessments



Chris Ritchie
Executive Director
Energy, Resources and Industry Assessments

Appendices

Appendix A – Environmental Impact Statement

Appendix B – Submissions

Appendix C – Agency Advice

Appendix D – Submissions Report

Appendix E – Additional Information

Appendix F – Recommended Development Consent

Appendices A to F are available at:

<https://www.planningportal.nsw.gov.au/major-projects/projects/sundown-solar-farm>

Appendix G – Consideration of Community Views

The Department publicly exhibited the EIS from 7 July 2023 to 3 August 2023, advertised the exhibition in The Australian and the Inverell Times, and notified landowners adjacent to the project boundary. During the exhibition period of the EIS, the Department received a total of 139 submissions from the public. 132 of those submissions were objections from individuals while seven were from special interest groups.

The key issues raised by the community include:

- road use and traffic impacts;
- potential loss of agricultural land;
- noise and vibration impacts;
- land use conflict;
- community consultation and project awareness;
- water demand and supply;
- fire risk; and
- dust impacts.

These issues have been addressed in **Table 10** and in **Section 5** of this assessment report.

Table 10 | Key community views and how they have been considered

Issue	Consideration
<p>Road use and traffic impacts</p>	<ul style="list-style-type: none"> • Ninety submissions received during the EIS exhibition period raised concerns about traffic and road safety impacts. • Recurrent Energy prepared Traffic Impact Assessment which was amended to address the matters raised in submissions and in response to advice received from TfNSW and Council. • Potential traffic impacts would be largely restricted to the approximate 21-month construction period (particularly during the 14-month peak) and would be suitably managed through road upgrades, restricting vehicles to approved routes, limiting the number of vehicle movements, road maintenance and the implementation of traffic management measures through a Traffic Management Plan (TMP). • With the implementation of these measures, and the recommended conditions, the Department, TfNSW and Council are satisfied that the project would not result in significant impacts on road network capacity, efficiency or safety. <p><u>Recommended conditions</u></p> <ul style="list-style-type: none"> • Undertake relevant road upgrades prior to commencement of pre-construction minor works or construction (whichever comes first). • Obtain all relevant approvals prior to use of heavy vehicles and heavy vehicles requiring escort on the public road network. • Restrict the number of vehicles during construction, upgrading and decommissioning to the identified peak volumes. • Ensure length of vehicles (excluding heavy vehicles requiring escort or high-risk heavy vehicles requiring escort) would not exceed 19 m. • Prepare and implement a TMP in consultation with TfNSW and Council, including provisions for dilapidation surveys and operation of shuttle buses, and details of the measures that would be implemented to address road safety.
<p>Land use suitability</p> <ul style="list-style-type: none"> • Potential loss of agricultural land • Land use conflict 	<ul style="list-style-type: none"> • Fifty-two submissions received during the EIS exhibition period raised concerns about establishing a solar farm on agricultural land. Thirty-nine submissions raised concerns regarding the suitability of the site for the project. • The project has been designed to avoid higher quality agricultural land. Whilst the project footprint includes fragmented Class 2 land (3 ha), it represents a very small area, is primarily occupied by an existing access track, and is located near water courses and not suitable for broadacre cropping. Accordingly, the Department considers that the project would not fragment or alienate any resource lands in the LGA and would be returned to usable agricultural land following decommissioning. • The Department also notes that of the 3 ha of Class 2 land that would be impacted, 2 ha is occupied by the internal access road which is an existing vehicular track. The remaining 1 ha of Class 2 land comprises fragments at the edge of the disturbance footprint along Kings Creek which are required to be maintained as Asset Protection Zone buffers. The Department therefore considers

Issue	Consideration
	<p>these impacts are very minor, and these factors must be balanced against the broader benefits of renewable energy development.</p> <ul style="list-style-type: none"> • The project would occur on 0.30% of land mapped as LSC Classes 3 and 4 within the Inverell Shire LGA, and 0.01% of land mapped as LSC Class 2. During construction and operation, the removal of cattle grazing has an estimated value of up to approximately \$190,000 per annum, which equates to 0.14% of the agricultural productivity value in the Inverell Shire LGA. • The project's development footprint, combined with the other proposed, approved and/or operational SSD solar farms in the New England North West region, would be approximately 11,569 ha. The loss of 11,569 ha of agricultural land represents a small proportion (0.18%) of the 63 million ha of land currently used for agricultural output in NSW. Given the nature and scale of the established agricultural industries within the region, the project would result in a negligible reduction in the overall agricultural productivity of the region. • The site is zoned RU1 Primary Production under the Inverell LEP. The project is consistent with the objectives of the RU1 zone by providing diversity in primary industry enterprises and systems appropriate for the area, minimising the fragmentation and alienation of resource lands, and minimising conflict between land uses within the RU1 zone and adjoining zones. • Under the Transport and Infrastructure SEPP, electricity generating works are permissible with consent on any land in a prescribed non-residential zone, including land zoned RU1 Primary Production. • In addition, based on a broader reading of the Inverell LEP, and consideration of the objectives of the RU1 zones and other strategic documents for the region, such as the <i>New England North West Regional Plan 2041</i>, the Department considers that there is no clear intention to prevent the development of a solar farm on the site. • Based on the above considerations, the Department considers that the proposed solar farm represents an effective and compatible use of the land within the region and that the site is suitable to accommodate the project. <p><u>Recommended conditions</u></p> <ul style="list-style-type: none"> • Maintain the agricultural capability of the site, including establishing ground cover and maintaining grazing within the site where practicable. • Fully reinstate the agricultural capability of the land following decommissioning of the project, including the requirement to return the development footprint to its existing land and soil capability.
Noise and vibration impacts	<ul style="list-style-type: none"> • Forty-eight submissions received during the EIS exhibition period raised concerns about potential noise impacts arising from the project. • Recurrent Energy prepared a Noise and Vibration Impact Assessment (NVIA) to accompany the EIS, and a noise impact addendum was provided as part of the Submissions Report. • Construction noise levels are expected to comply with the EPA's highly noise affected level of 75 dB(A). While exceedances of the more stringent construction

Issue	Consideration
	<p>noise management levels are predicted to occur at three receivers (R11, R12 and R14), these exceedances would be short term and temporary (occurring for 2 weeks during the Stage 1 access road widening works).</p> <ul style="list-style-type: none"> • Construction vibration impacts are expected to arise from the access road widening works at one non-associated receiver (R14). Recurrent Energy would implement a range of measures to mitigate vibration impacts at this receiver. • There would be no noise or vibrational exceedances at any receiver locations during operation or decommissioning. • The Department considers that noise generated during construction, operation, and decommissioning of the project can be appropriately managed through implementation of the proposed mitigation measures and adherence to the recommended conditions of consent. <p><u>Recommended conditions</u></p> <ul style="list-style-type: none"> • Minimise noise generated by the construction, upgrading or decommissioning activities on site in accordance with best practice requirements. • Comply with the noise management levels as derived from the NSW Noise Policy for Industry (EPA, 2017) at any non-associated residence. • Comply with safe working distances for vibration generating equipment from sensitive receivers as required by the NSW Construction Noise and Vibration Guideline. • Restriction of construction to standard construction hours (Monday to Friday between 7:00am to 6:00pm and Saturday between 8:00am to 1:00pm).
Community consultation and project awareness	<ul style="list-style-type: none"> • Thirty-six submissions received during the EIS exhibition period raised concerns about the consultation efforts undertaken by Recurrent Energy. • The EIS provided details the community consultation undertaken prior to EIS lodgement, including a community information session, establishment of a project website and email contact, and distribution of project newsletters to members of the community, neighbouring landowners, community session participants, key stakeholders and anyone else who registered to receive project updates. • Following the public exhibition period, the Department requested Recurrent Energy to respond to the issues raised in submissions, including details of the community consultation carried out after EIS lodgement. This included: <ul style="list-style-type: none"> – written project updates and invitations for face-to-face meetings were sent to all non-associated landowners and residents of Swan Vale within 4 km of the project; – meetings with one landowner (the owner of residence R14) to discuss the project and the effects of upgrading the access road (Sturmans Road) near the property, the movement of livestock and the road design elements, including cattle grids and creek crossings; and

Issue	Consideration
	<ul style="list-style-type: none"> – sent emails to landowners within 2 km of the project area to provide a project update and invite feedback. – The broader community were provided ongoing project updates via the project website which included project updates and frequently asked questions, a dedicated project hotline, and a dedicated email address. • Noting the above, the Department considers that the community consultation activities carried out by Recurrent Energy to date are adequate and have been in accordance with <i>Undertaking Engagement Guidelines for State Significant Projects</i>.
Water demand and supply	<ul style="list-style-type: none"> • Thirty-one submissions received during the EIS exhibition period raised concerns about the project’s water requirements and supply arrangements. • The project would require 75 ML of water over the 21 month construction period and 475 KL of water per annum during operation (over 35 years). • The project would source 50% of its construction water requirement via a Council-owned standpipe (which Council has agreed to). The remaining 50% would be sourced from an existing on-site bore (under a Miscellaneous Works Application to change the bore use from Domestic/Stock to Commercial). Both Water NSW and NSW DCCEEW Water Group have been consulted and confirmed their satisfaction with this approach. • The Department therefore considers that the project would not result in any adverse impacts on water demand in the locality. <p><u>Recommended conditions</u></p> <ul style="list-style-type: none"> • The Applicant must ensure that it has sufficient water for all stages of the project, and if necessary, adjust the scale of the development to match its available water supply.
Fire risk	<ul style="list-style-type: none"> • Twenty-nine submissions received during the EIS exhibition period raised concerns about potential bushfire risk. • Recurrent Energy prepared a Bushfire Risk Assessment (BRA) to assess the bushfire threat to and from the project and identify protection measures to address those risks. • Recurrent Energy has committed to the following bushfire management measures: <ul style="list-style-type: none"> – establishing a 10 m APZ around critical infrastructure and complying with PBP 2019 and standards for APZs; – preparing a Bushfire Management Plan, FSS and Emergency Response Plan as per FRNSW’s recommendations; and – ensuring adequate water supply, including static tanks at access points and mobile firefighting resources. • The Department consulted with RFS and FRNSW throughout the assessment and in preparing the recommended conditions of consent, who advised that the BRA addressed the requirements of the PBP 2019, and raised no objection to the

Issue	Consideration
	<p>project subject to the implementation of the recommendations identified in the BRA, which Recurrent Energy has committed to.</p> <p><u>Recommended conditions</u></p> <ul style="list-style-type: none"> • The BESS must not exceed the proposed total capacity of 150 MW across the project site and must be installed in an arrangement consistent with the approved project layout. • Prepare a Fire Safety Study and an Emergency Response Plan for the project. • Ensure the project complies with the relevant asset protection requirements in the RFS's PBP 2019 and Standards for APZs.
Dust	<ul style="list-style-type: none"> • Twenty-nine submissions received during the EIS exhibition period raised concerns about dust and air quality impacts. • The primary source of dust from the project would occur due to earthworks/excavation and vehicle movements on unsealed roads. Recurrent Energy has committed to the following dust suppression measures during construction: <ul style="list-style-type: none"> – use of a water cart on unsealed areas, as required; – restriction of traffic speeds on the internal access road; – sealing a 150 m section of Spring Mountain Road nearest R14 (as agreed with Council); – a commitment to ensure disturbed areas are revegetated/covered as soon as practicable; – requirement to ensure vehicle loads are secured; – dust suppression measures would take into consideration weather conditions; and – stabilise pavements with polymer, cement or similar, where practicable. • The Department considers that dust generated during construction of the project could be appropriately managed through implementation of the proposed mitigation measures and adherence to the recommended conditions of consent. <p><u>Recommended conditions</u></p> <ul style="list-style-type: none"> • Minimise dust generated by the development, including measures ensuring: <ul style="list-style-type: none"> – activities are carried out on site in a manner that minimises dust generation, including emissions of windblown and/or traffic-generated dust; – development-related vehicles leaving the site have any loads covered and minimise dirt being stacked onto the public road network; and – water tankers are used to spray the surface of unsealed roads when practicable and appropriate.

Appendix H – Statutory considerations

Mandatory matters for consideration

The Department’s consideration of the mandatory matters for consideration (pursuant to section 4.15 of the EP&A Act) is provided in **Table 11** below.

Table 11 | Mandatory Matters for Consideration

Matter for Consideration	Assessment
Environmental planning instruments, proposed instruments, and development control plans	<p>The Department’s consideration of the relevant instruments is provided in Table 13 and Table 14.</p> <p>Clause 2.10 of the Planning Systems SEPP specifies that development control plans do not apply to State significant development, and as such are not required to be considered in the project’s assessment.</p>
Planning agreements	<p>As discussed in Section 5.5, Recurrent Energy have reached in principle agreement with Inverell Shire Council to ensure delivery of community benefits. Conditions of consent have been recommended to reflect this (see Appendix F).</p>
Regulations	<p>The Department has assessed the development in accordance with all relevant matters prescribed in the EP&A Regulation, the findings of which are contained in this assessment report.</p>
Likely impacts	<p>The Department has considered the likely impacts of the project, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality, in Section 5 of this report.</p> <p>The Department concludes that all impacts can be appropriately managed and mitigated through the recommended conditions of consent (see Appendix F).</p>
Suitability of the site	<p>The Department considers that the site is suitable for the proposed project as it is located in the New England REZ, has good solar resources, can connect to an existing Transgrid substation and transmission line traversing the site, is consistent with the Department’s Solar Guideline, and is permissible with consent in an RU1 Primary Production zone.</p>
Submissions	<p>All matters raised in submissions have been summarised in Section 4.4 of this report and given due consideration in the assessment of the project (see Section 5 and Appendix G).</p>
The public interest	<p>The project would assist in transitioning the electricity sector from coal and gas-fired power stations to low emissions sources and is consistent with the goals of the NSW’s Climate Change Policy Framework and the Net Zero Plan Stage 1: 2020 – 2030.</p> <p>With a generating capacity of 360 MW, the project would generate enough electricity to power approximately 144,000 homes. This is consistent with the NSW Climate Change Policy Framework of achieving net zero emissions by</p>

Matter for Consideration	Assessment
	<p>2050. The proposed BESS (150 MW / 600 MWh) would allow energy storage for dispatch to the grid outside of daylight hours and/or during peak demand, increasing grid stability and energy security.</p> <p>The Department considers that the project achieves an appropriate balance between maximising the efficiency of the solar resource development and minimising the potential impacts on surrounding land users and the environment. Through job creation and capital investment and a proposed VPA with Inverell Shire Council, the project would also stimulate economic investment in renewable energy and provide flow-on benefits to the local community.</p> <p>The project has the potential assist in the reduction of reliance on fossil fuels, thereby contributing to reduction in air pollution and greenhouse gas emissions, while also supporting regional NSW through job creation and investment in communities that may not have similar opportunities from other industries.</p> <p>The environmental impacts of the development would be appropriately managed via the recommended conditions. Overall, the Department's assessment concludes that the project would result in benefits to the State of NSW and considers the project is in the public interest. As such the Department concludes that the project is approvable subject to the recommended conditions of consent (see Appendix F).</p>

Objects of the EP&A Act

A summary of the Department's consideration of the objects of the EP&A Act is provided in **Table 12** below.

Table 12 | Objects of the EP&A Act

Objects of the EP&A Act
<ul style="list-style-type: none"> • The objects of most relevance to the consent authority's decision on whether to grant consent to the project are found in sections 1.3(a), (b), (c), (e), and (f) of the EP&A Act. • The project encourages the proper development of natural resources (Object 1.3(a)) and the promotion of orderly and economic use of land (Object 1.3(c)), particularly as: <ul style="list-style-type: none"> – the proposed land use is permissible with consent in the RU1 zone pursuant to clause 2.36 of the Transport and Infrastructure SEPP; – the site is suitable for efficient solar energy development; – it can be managed such that the impacts of the project could be adequately minimised, managed, or at least compensated for, to an acceptable standard; – it would contribute to a more diverse local industry, thereby supporting the local economy and community; – it would not fragment or alienate resource lands in the LGA; and

Objects of the EP&A Act

- it is consistent with the goals of NSW’s Climate Change Policy Framework and Net Zero Plan Stage 1: 2020 – 2030 and would contribute to meeting Australia’s renewable energy targets with the overall goal of reducing greenhouse gas emissions.
- The Department has considered the encouragement of ESD (Object 1.3 (b)) in its assessment of the project. This assessment integrates all significant socio-economic and environmental considerations and seeks to avoid any potential serious or irreversible environmental damage, based on an assessment of risk-weighted consequences.
- In addition, the very nature of the proposed solar farm is consistent with the principles of ESD. As such, the project can be carried out in a manner that is consistent with the principles of ESD.
- Consideration of environmental protection (Object 1.3(e)) is provided in Section 5 of this report. Following its consideration, the Department considers that the project could be undertaken in a manner that would at least maintain the biodiversity values of the locality over the medium to long term and would not significantly impact threatened species and ecological communities of the locality. The Department is also satisfied that any residual biodiversity impacts could be managed and/or mitigated by imposing appropriate conditions and retiring the required biodiversity offset credits.
- Consideration of the sustainable management of built and cultural heritage (Object 1.3(f)) is also provided in Section 5.5 of this report. Following its consideration, the Department considers the project would not significantly impact the built or cultural heritage of the locality, and any residual impacts can be managed and/or mitigated by imposing appropriate conditions.

EP&A Regulation

There are no additional matters in Part 4, Division 1 of the EP&A Regulation that the consent authority is required consider.

Environmental Planning Instruments (EPIs)

A summary of the Department’s consideration of the relevant EPIs (pursuant to section 4.15(1)(a)(i) of the EP&A Act) is provided in **Table 13** and **Table 14** below.

Table 13 | State Environmental Planning Policies (SEPPs)

SEPP	Assessment
State Environmental Planning Policy (Planning Systems) 2021 (Planning Systems SEPP)	<p>The project is defined as SSD pursuant to section 4.36 of the EP&A Act due to its triggering of the criteria in clause 20 of Schedule 1 of Planning Systems SEPP, as it is a development for the purpose of “electricity generating works and heat or co-generation” with an EDC of more than \$30 million.</p> <p>Under section 4.5(a) of the EP&A Act and clause 1(b) of section 2.7 of the Planning Systems SEPP, the IPC is the consent authority for the project as it received more than 50 unique objections during the exhibition period. Notwithstanding the requirements of section 4.15(1)(a)(iii) of the EP&A Act, clause 2.10 of the Planning Systems SEPP specifies that development</p>

SEPP	Assessment
	control plans do not apply to state significant development, and as such are not required to be considered in the project's assessment.
State Environmental Planning Policy (Transport and Infrastructure) 2021 (Transport and Infrastructure SEPP)	<p>The project is defined as an “electricity generating works” land use, which is permissible with consent in a prescribed non-residential zone (including RU1 and SP2) pursuant to clause 2.36 of the Transport and Infrastructure SEPP.</p> <p>In accordance with the Transport and Infrastructure SEPP, the Department has given written notice of the project to Transgrid and TfNSW (section 2.48). The Department has considered the advice received and, where appropriate, developed recommended conditions of consent to address the recommendations and advice of these authorities. The Department considers that such conditions would provide appropriate protection for public infrastructure. The project site does not have frontage to any classified roads (section 2.119).</p>
State Environmental Planning Policy (Biodiversity and Conservation) 2021 (“Biodiversity and Conservation SEPP”)	<p>Chapters 3 (Koala Habitat Protection 2020) and 4 (Koala Habitat Protection 2021) of the State Environmental Planning Policy (Biodiversity and Conservation) 2021 work together to promote the conservation and appropriate management of natural vegetation that provides koala habitat.</p> <p>The site is zoned RU1 (Primary Production) and is therefore subject to the Koala Habitat Protection 2020 provisions. Potential koala presence and any associated impacts were considered in the BDAR. Whilst the site contains PCTs associated with koala habitat, no koalas were recorded during targeted surveys and therefore did not generate any species credits.</p>
State Environmental Planning Policy (Primary Production) 2021 (“Primary Production SEPP”)	<p>The Primary Production SEPP aims to facilitate the orderly and economic use and development of lands for primary production to reduce land use conflict and sterilisation of rural land and to identify State significant agricultural land.</p> <p>The Department has considered these matters in Section 5.2 of this report, concluding that the proposed solar farm represents an effective and compatible use of the land within the region and that the site is suitable to accommodate the development.</p>
State Environmental Planning Policy (Resilience and Hazards) 2021 (“Resilience and Hazards SEPP”)	<p>Recurrent Energy completed a Preliminary Site Investigation (PSI) in accordance with the Resilience and Hazards SEPP which confirmed that whilst the site presented two sources of moderate contamination risk, the recommended management measures were sufficient to confirm the site's suitability for the proposed land use. A preliminary hazard analysis (PHA) prepared for the project concluded the risk profile of the project was tolerable and that there was negligible risk of off-site consequences associated with project. Recurrent Energy has committed to implementing all controls recommended by the PHA. Accordingly, the Department is satisfied that the proposed development is not potentially hazardous or</p>

SEPP	Assessment
	<p>offensive and does not pose an unacceptable risk to community or environment.</p> <p>The Department has also considered the contaminated land provisions of the Resilience and Hazards SEPP (Ch 4). Given the site and its surrounds have historically been used for agricultural purposes, the site would therefore be suitable for the proposed development. Recurrent Energy has committed to implementing management plans which would minimise the potential for contamination of the site associated with the development and has also committed to implementing an unexpected finds protocol to manage any contamination which may be identified during construction.</p>

Inverell LEP 2012

The Department considers that the project is consistent with the LEP. Consideration of the relevant provisions of Inverell LEP is provided in **Table 14** below.

Table 14 | Inverell LEP 2012

LEP Provision	Assessment
2.3 Zone objectives and land use table	<p>The site is zoned RU1 Primary Production. Whilst electricity generating works are not listed as a permissible land use in the RU1 land use table of the LEP, the Transport and Infrastructure SEPP provides that electricity generating works are permissible with consent on any land in a prescribed non-residential zone, including land zoned RU1 Primary Production.</p> <p>In addition, based on a broader reading of the Inverell LEP, and consideration of the objectives of the RU1 zones and other strategic documents for the region, such as the New England North West Regional Plan 2041, the Department considers that there is no clear intention to prevent the development of a solar farm on the subject land.</p> <p>The project is consistent with the objectives of the RU1 zone by:</p> <ul style="list-style-type: none"> • providing diversity in primary industry enterprises and systems appropriate for the area; • minimising the fragmentation and alienation of resource lands; and • minimising conflict between land uses within the RU1 zone and adjoining zones.
4.1 Minimum subdivision lot size	<p>The proposed subdivision would result in the creation of two new lots that would comprise areas less than the 200 ha minimum lot size standard and is therefore prohibited under the LEP. Notwithstanding this, section 4.38(3) of the EP&A Act allows development consent to be granted for SSD applications where the</p>

LEP Provision	Assessment
	<p>development is partially prohibited. While the Department can override a partial prohibition for a SSD, it must assess the merits of such a decision. The Department has considered the merits of the subdivision as follows:</p> <ul style="list-style-type: none"> • Council did not raise concern with the subdivision; • The subdivision is necessary for the operation of the substation; • It would not result in any additional dwelling entitlements on the subdivided lots; • The project aligns with the RU1 zone's key objective by supporting diversity and primary industry enterprises; and • The Department has fully considered the impacts of the project and considers it can be approved.
5.10 Heritage conservation	<p>No heritage items listed on the Commonwealth, National or States registers are located within or surrounding the site. There are no heritage items listed in Schedule 5 of Inverell LEP within 5 km of the site.</p> <p>The Department is satisfied that any potential impacts to Aboriginal heritage can managed and mitigated, subject to compliance with the recommended conditions</p> <p>The Department considers that the project would not have any adverse impacts on the Aboriginal heritage values of the locality or any items of historic heritage significance.</p>
5.21 Flood planning	<p>The Department has assessed the potential for flood related impacts and is satisfied that the risks can be managed and mitigated through compliance with the recommended conditions of consent.</p>
6.1 Earthworks	<p>The project would include site preparation and earthworks. The Department has assessed the potential for these earthworks to lead to drainage patterns, soil stability and quality, future land use, and associated impacts to surrounding land.</p> <p>The Department is satisfied that any potential impacts resulting from earthworks can managed and mitigated, subject to compliance with the recommended conditions of consent.</p>
6.6 Essential services	<p>The Department has considered the essential services required for the project and is satisfied that the project components meet these requirements.</p>

Appendix I – Assessment of Matters of National Environmental Significance

In accordance with the Bilateral Agreement between the AG DCCEEW and NSW Government, the Department provides the following additional information required by the Commonwealth Minister, in deciding whether to approve a proposed action (i.e. the project) under the EPBC Act.

The Department's assessment has been prepared based on the assessment contained in the Sundown Solar Farm EIS, Submissions Report, BDAR, and additional information provided during the assessment process, public submissions, and advice provided by the CPHR, other NSW government agencies, and the AG DCCEEW.

This appendix is supplementary to, and should be read in conjunction with, the assessment included in **Section 5.4** of this assessment report, which includes consideration of impacts to listed threatened species and communities, and mitigation and offsetting measures for MNES.

Controlled Action Decision – EPBC 2022/09249

On 29 August 2022, the Sundown Solar Farm project was determined to be a controlled action by the AG DCCEEW for the controlling provisions of listed threatened species and communities (sections 18 and 18A of the EPBC Act). The Commonwealth Referral Decision (EPBC 2022/09249) (Referral Decision) was based on likely significant impacts to:

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and DNG – critically endangered;
- Austral Toadflax (*Thesium australe*) – vulnerable; and
- Regent Honeyeater (*Anthochaera phrygia*) – critically endangered.

Additionally, the AG DCCEEW identified there was also some risk that there may be significant impacts on the following matters:

- South-eastern Glossy Black-Cockatoo (*Calyptorhynchus lathami lathami*) – vulnerable;
- Swift Parrot (*Lathamus discolor*) – critically endangered;
- Yellow-spotted Tree Frog (*Litoria castanea*) – critically endangered;
- Spotted-tail Quoll (*Dasyurus maculatus maculatus* SE mainland population) – endangered;
- Corben's Long-eared Bat (*Nyctophilus corbeni*) – vulnerable;
- Yellow-bellied Glider (south-eastern) (*Petaurus australis australis*) – vulnerable;
- Koala (*Phascolarctos cinereus* combined populations of QLD, NSW, and ACT) – endangered;
- Grey-headed Flying-fox (*Pteropus poliocephalus*) – vulnerable;
- Hairy-joint Grass (*Arthraxon hispidus*) – vulnerable;
- *Callistemon pungens* – vulnerable;
- Bluegrass (*Dichanthium setosum*) – vulnerable;
- McKie's Stringybark (*E. mckieana*) – vulnerable;
- Blackbutt Candlebark (*E. rubida* subsp. *Barbigerorum*) – vulnerable;

- Hawkweed (*Picris evae*) – vulnerable; and
- Border Thick-tailed Gecko (*Uvidicolus sphyrurus*) – vulnerable.

All entities identified by the AG DCCEEW were assessed in the project BDAR, as outlined below.

Impacts on EPBC Act Listed Threatened Species and Communities

Section 5.4 of this report describes the biodiversity assessment undertaken for the project and the resulting BDAR.

Table 15 below provides a summary of the likelihood of occurrence for each of the species listed above that were identified by the AG DCCEEW as requiring consideration.

Table 15 | Likelihood of occurrence of MNES identified by the AG DCCEEW

Entity	Conservation status	Likelihood of occurrence	Significant impact assessment
Threatened Ecological Communities (TEC)			
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and DNG	CE	Present	PCT 510, PCT 571 and PCT 590 are associated with this TEC and were found present on the site, meeting condition threshold requirements. Impacts to 25.63 ha of White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and DNG would be offset via ecosystem credits.
Threatened Flora Species			
Bluegrass (<i>Dichanthium setosum</i>)	V	Present	Impacts to approximately 358 plants (across 125.94 ha) associated with PCTs 510, 571 and 590 would be offset via species credits.
Austral Toadflax (<i>Thesium australe</i>)	V	Present	Impacts to approximately 1,691 plants (across 130.58 ha) associated with PCTs 510, 571 and 590 would be offset via species credits.
Hairy-joint Grass (<i>Arthraxon hispidus</i>)	V	No further survey required	Habitat assessment undertaken found the disturbance footprint lacks suitable wet habitat for this species to occur.
<i>Callistemon pungens</i>	V	Not present / not recorded in targeted surveys	Not recorded during targeted surveys conducted in accordance with relevant guidelines.
McKie's Stringybark (<i>E. mckieana</i>)	V	Not present / not recorded in targeted surveys	Not recorded during targeted surveys conducted in accordance with relevant guidelines.
Blackbutt Candlebark (<i>E. rubida</i> subsp. <i>VBarbigerorum</i>)	V	Not present / not recorded in targeted surveys	Not recorded during targeted surveys conducted in accordance with relevant guidelines.

Entity	Conservation status	Likelihood of occurrence	Significant impact assessment
Hawkweed (<i>Picris evae</i>)	V	Not present / not recorded in targeted surveys	Not recorded during targeted surveys conducted in accordance with relevant guidelines.
Threatened Fauna Species			
Swift Parrot (<i>Lathamus discolor</i>)	CE	Subject land contains potential foraging habitat	The Swift Parrot is unlikely to be significantly impacted. However, impacts to up to 142.16 ha of potential foraging habitat associated with PCTs 510 and 590 would be offset via ecosystem credits.
South-eastern Glossy Black-Cockatoo (<i>Calyptorhynchus lathami lathami</i>)	V	Not present / not recorded during targeted surveys	Not recorded during targeted surveys conducted in accordance with relevant guidelines. However, impacts to 142.16 ha of potential foraging habitat associated with PCTs 510 and 590 would be offset via ecosystem credits.
Koala (<i>Phascolarctos cinereus</i> combined populations of QLD, NSW, and ACT)	E	Not present / not recorded in targeted surveys	Not recorded during targeted surveys conducted in accordance with relevant guidelines.
Yellow-spotted Tree Frog (<i>Litoria castanea</i>)	CE	Not present	Habitat assessment undertaken - the disturbance footprint lacks suitable habitat for this species to shelter within. There are no records of the species within the locality.
Spotted-tail Quoll (<i>Dasyurus maculatus maculatus</i> SE mainland population)	E	Subject land contains potential habitat	Spotted-tail Quoll is unlikely to be significantly impacted. However, impacts to 142.39 ha of sub-optimal habitat associated with PCTs 84, 510 and 590 would be offset via ecosystem credits.
Corben's Long-eared Bat (<i>Nyctophilus corbeni</i>)	V	Not present / not recorded in targeted surveys	Not recorded during targeted surveys conducted in accordance with relevant guidelines. The species is not associated with any PCTs recorded on site.
Yellow-bellied Glider (south-	V	Not present	The Yellow-bellied Glider is unlikely to be significantly impacted.

Entity	Conservation status	Likelihood of occurrence	Significant impact assessment
eastern) (<i>Petaurus australis australis</i>)			There are no records of the species within the locality, and it is not associated with any PCTs recorded on site.
Grey-headed Flying-fox (<i>Pteropus poliocephalus</i>)	V	Not present	The Grey-headed Flying-fox is unlikely to be significantly impacted. There are no records of the species within the locality, and the site does not contain suitable foraging habitat for this species.
Regent Honeyeater (<i>Anthochaera phrygia</i>)	CE	Subject land contains potential foraging habitat	Regent Honeyeater is unlikely to be significantly impacted. However, impacts to up to 142.58 ha of foraging habitat associated with PCTs 84, 510, 571 and 590 would be offset via ecosystem credits.
Painted Honeyeater (<i>Grantiella picta</i>)	V	Subject land contains potential foraging and breeding habitat	Painted Honeyeater is unlikely to be significantly impacted. However, impacts to up to 142.58 ha of foraging and breeding habitat associated with PCTs 84, 510, 571 and 590 would be offset via ecosystem credits.
Border Thick-tailed Gecko (<i>Uvidicolus sphyrurus</i>)	V	No further survey required	Border Thick-tailed Gecko is unlikely to be significantly impacted. The disturbance footprint lacks suitable habitat for this species to occur.

Impacts on threatened ecological communities

As described in **Section 5.4** of this report, Recurrent Energy has generally focused on avoidance of impacts through site selection and avoidance of higher quality native vegetation and habitat during the preliminary design process. This work focused largely on avoiding impacts to Box Gum Woodland, habitat for *Dichanthium setosum* (Bluegrass) and *Thesium australe* (Austral Toadflax) and mature trees with hollows.

Notwithstanding, the project would result in the clearing of 25.63 ha of White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and DNG, which meets the conditions thresholds under the EPBC Act. Of the 25.63 ha, only 1.84 ha is woodland, with the vast majority of this comprised of low-quality DNG.

Table 16 | Extent of Box Gum Woodland within the disturbance footprint (ha)

Plant Community Type	BC Act	EPBC Act
Woodland		
Blakely's Red Gum – Yellow Box grassy woodland of the New England Tableland Bioregion and NSW North Coast Bioregion (PCT 510)	1.78	1.43
Ribbon Gum – Rough-barked Apple – Yellow Box grassy woodland of the New England Tableland Bioregion and NSW North Coast Bioregion (PCT 571)	0.19	0.03
White Box grassy woodland on the Inverell basalts mainly in the Nandewar Bioregion (PCT 590)	1.89	0.39
Scattered trees in DNG		
Blakely's Red Gum – Yellow Box grassy woodland of the New England Tableland Bioregion (PCT 510)	0.80	0.45
White Box grassy woodland on the Inverell basalts mainly in the Nandewar Bioregion (PCT 590)	0.30	0
DNG		
Blakely's Red Gum – Yellow Box grassy woodland of the New England Tableland Bioregion (PCT 510)	84.75	22.94
White Box grassy woodland on the Inverell basalts mainly in the Nandewar Bioregion (PCT 590)	52.65	0.40
Subtotal (woodland)	3.86	1.84
Subtotal (scattered trees in DNG)	1.10	0.45
Subtotal (DNG)	137.40	23.34
Total	142.35	25.63

As a result of design refinements, areas of higher quality vegetation were retained, as much as practicable, which also allowed for improved connectivity within retained patches.

As a result, the assessments of significance in the MNES Assessment concluded that the action may have a significant impact on these communities.

The impacts to this community would be appropriately offset via the ecosystem credit requirements detailed in **Section 5.4** of this report and in accordance with the recommended conditions of consent in **Appendix F**.

Impacts on threatened flora and fauna species

Two threatened flora species were recorded during project surveys:

- *Dichanthium setosum* (Bluegrass) – listed as vulnerable under BC Act and EPBC Act; and
- *Thesium australe* (Austral Toadflax) - listed as vulnerable under BC Act and EPBC Act.

Six threatened fauna species were also recorded within or near the development footprint. Brown treecreeper, Diamond Firetail, Dusky Woodswallow, Little Lorikeet, Scarlet Robin and Little Eagle. These are all ecosystem credit species associated with the PCTs recorded in the development footprint. No breeding for Little Eagle, the only dual credit species, was detected during surveys.

The assessment of significance of these species determined that the project is unlikely to have significant impact on any threatened flora or fauna species. CPHR did not raise any concerns in relation to the significant impact assessment undertaken for the threatened flora and fauna species.

The Department considers that any potential habitat for the EPBC Act listed species identified above would be appropriately offset via the credit requirements detailed in **Section 5.4.3** of this report. The Department has recommended conditions and additional measures to avoid and minimise impacts on threatened fauna species as detailed in **Section 5.4.3** of this report.

Additional EPBC Act Considerations

In addition to those already discussed, **Table 17** contains an assessment of the project against the mandatory matters for consideration, factors to have regard to, and consideration on deciding conditions in the EPBC Act.

Table 17 | Additional considerations for the Commonwealth Minister under the EPBC Act

Provision	Consideration	Assessment
Mandatory considerations		
Part 1, Section 3A Part 16, Section 391(2)	Principles of ESD, including the precautionary principle, have been taken into account, in particular: <ul style="list-style-type: none"> • the long term and short term economic, environmental, social and equitable considerations that are relevant to this decision; • conditions that restrict environmental impacts and impose monitoring and adaptive management, reduce any lack of certainty related to the potential impacts of the project; • conditions requiring the project to be delivered and operated in a sustainable way to protect the environment for future generations and conserving the relevant 	The implementation of the recommended conditions of consent would ensure the project would be consistent with the principles of ESD.

Provision	Consideration	Assessment
	<p>matters of national environmental significance;</p> <ul style="list-style-type: none"> • advice which emphasises the importance of conserving biological diversity, ecological and cultural integrity in relation to all of the controlling provisions for this project; and • mitigation measures to be implemented which reflect improved valuation, pricing and incentive mechanisms which place a financial cost on the proponent to mitigate the environmental impacts of the project. 	
<p>Part 3, Section 20</p>	<p>Requirement for approval of activities with a significant impact on a listed migratory species.</p>	<p>The project has been determined not to have a significant impact on any listed migratory species.</p>
<p>Part 9, Section 136(1)(b)</p>	<p>Economic and social matters of relevance to the project.</p>	<p>The project would provide benefits for the local and regional economy and is of public benefit for up to 35 years. Up to 200 workers would be required during the construction period.</p> <p>Impacts on the local community would primarily occur during the construction period, which has been considered in the assessment report. The recommended conditions require the proponent to minimise potential traffic and amenity impacts including noise, dust, and visual impacts.</p>
<p>Part 9, Section 136(2)(e)</p>	<p>Other relevant information relating to potential impacts of the project.</p>	<p>All relevant information relating to potential impacts of the project have been taken into account in this assessment.</p>
<p>Part 9, Section 139(1)</p>	<p>Requirements for decisions about threatened species and endangered communities.</p>	<p>Australia's obligations under the Convention on Biological Diversity (Biodiversity Convention) include the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and technologies, and by appropriate funding.</p>

Provision	Consideration	Assessment
		The recommendations of this assessment report are consistent with the Biodiversity Convention, which promotes environmental impact assessment (such as this process) to avoid and minimise adverse impacts on biological diversity. Accordingly, the recommended development consent requires avoidance, mitigation and management measures for listed threatened species, and all information related to the project is required to be publicly available to ensure equitable sharing of information and improved knowledge relating to biodiversity.
Part 9, Section 140	Requirements for decisions about migratory species.	The project would not have a significant impact on any listed migratory species.
Factors to have regard to		
Part 12, Section 176(5)	Consideration of bioregional plans.	There is no approved bioregional plan related to the activity.
Consideration on deciding conditions		
Part 9, Section 134(4)	<p>Must consider:</p> <ul style="list-style-type: none"> Information provided by the person proposing to take the action or by the designated Applicant of the action; and The desirability of ensuring as far as practicable that the condition is a cost-effective means for the Commonwealth and the person taking the action to achieve the object of the condition. 	<p>All project related documentation is available at:</p> <p>https://www.planningportal.nsw.gov.au/major-projects/projects/sundown-solar-farm</p> <p>Imposition of the recommended conditions of consent at Appendix F is a cost-effective means of achieving their purpose. The recommended conditions are based on material provided by Recurrent Energy that was prepared in consultation with the Department, CPHR, and other government agencies.</p>

Conclusions on Controlling Provisions

For the reasons set out in **Section 5.4** of this report and this appendix, the impacts of the action would be acceptable subject to the avoidance and mitigation measures described in the EIS, Submissions Report, BDAR, and recommended conditions of consent specified in **Appendix F**.