



Blind Creek Solar Farm

State Significant Development

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Executive Summary

Blind Creek Solar Farm Pty Ltd (BCSF) proposes to develop a 350 megawatt (MW) solar farm with 300 MW / 600 MW-hour (MWh) of battery storage located approximately 30 km north-east of Queanbeyan within the Queanbeyan-Palerang local government area.

The Department exhibited the Environmental Impact Statement for the project and received 45 public submissions (4 objections, 38 supporting and 3 providing comment) and comment from Queanbeyan-Palerang Regional Council. Advice was also received from 13 government agencies. A late submission from Goulburn Mulwaree Council and letter containing 11 signatures was also received.

In response to the agency advice and submissions on the project, BCSF undertook additional assessments and made several minor amendments to the proposed project. These minor amendments would not affect the generating capacity of the project and would lead to better visual, biodiversity and traffic outcomes. The key assessment issues for the project are energy transition, land use compatibility and visual impacts.

The site is currently primarily used for grazing with some cropping. No Biophysical Strategic Agricultural Land would be disturbed by the project, and the site comprises Class 5 and 6 soils. The project would not significantly reduce the overall agricultural productivity of the region and the Department is satisfied that the site can continue to be used in part for ongoing agricultural uses, and could be returned to agricultural uses in the future.

The Department recognises that the introduction of the project would represent a change to the local rural landscape but considers the visual impacts would not be significant with the proposed mitigation measures, including landscaping planting along the property boundary in locations where there is no existing vegetation or to supplement existing landscaping and where infrastructure might be visible from key viewpoints.

Overall, the Department considers the site to be suitable for the project as it has good solar resources and available capacity on the existing electricity network and is consistent with the Department's *Large-Scale Solar Energy Guideline*. The site is located in close proximity to Tarago Road in a rural area with access to existing transmission infrastructure.

The Department has also undertaken a comprehensive assessment of the full range of other potential impacts, including biodiversity, heritage, traffic, noise, hazards and water. The Department has recommended a range of detailed conditions, developed in conjunction with agencies and Councils, to ensure all potential impacts are effectively minimised, managed or offset.

The project is consistent with the Commonwealth's Renewable Energy Target and NSW's *Climate Change Policy Framework* and the *Net Zero Plan Stage 1: 2020 – 2030*, as it would contribute 350 MW of renewable energy to the National Electricity Market and 300 MW of energy storage to dispatch energy to the grid when the energy generation from renewable resources is limited.

The project would also provide flow-on benefits to the local community, including a community benefit sharing scheme, up to 300 construction jobs and a capital investment of \$503 million. A Voluntary Planning Agreement has also been executed with Queanbeyan-Palerang Regional Council to provide \$1.24 million in developer contributions. A further payment of \$500,000 will be provided to Queanbeyan-Palerang Regional Council for upgrade works to Tarago Road. The project would result in benefits to the state of NSW and the local community and is therefore in the public interest.

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1 Project

Blind Creek Solar Farm Pty Ltd (BCSF) proposes to develop a new State significant development (SSD) solar farm, approximately 7 kilometres (km) north of Bungendore and 30 km north-east of Queanbeyan in the Queanbeyan-Palerang local government area (LGA) (see **Figure 1**).

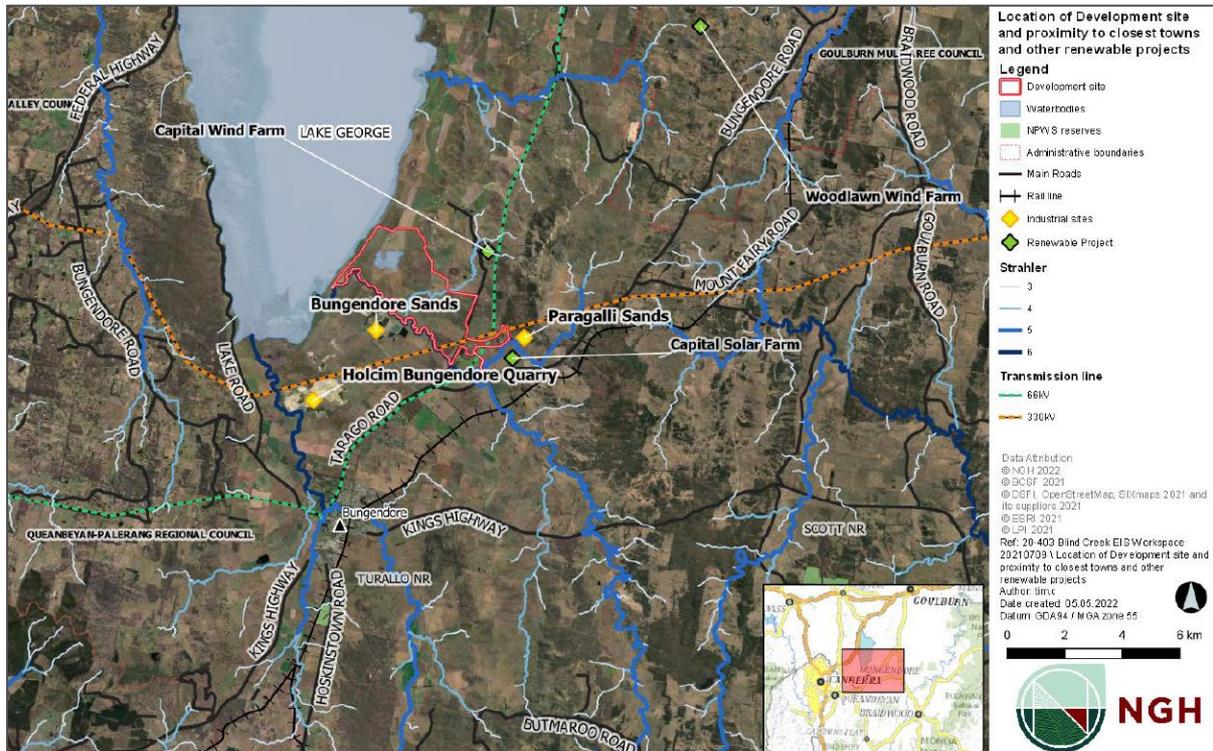


Figure 1 | Regional Context Map

The project involves the construction of a new solar farm with a generating capacity of 350 megawatt (MW) and 300 MW / 600 MW-hour (MWh) of battery energy storage. It also involves the upgrading and decommissioning of equipment over time. While the capacity of the project may increase over time as technology improves, the footprint of the development would not be permitted to increase without further planning approval.

The project would include an on-site substation and connection to an existing 330 kilovolt (kV) transmission line operated by Transgrid that crosses east-west through the site (see **Figure 1**).

To facilitate access to the site, BCSF proposes upgrade works to the existing site access road and Tarago Road intersection, including provision of a basic left turn treatment.

The solar farm would be constructed over approximately 12 to 18 months, with a peak construction period of 6 to 9 months.

The key components of the project are summarised in **Table 1**, shown in **Figure 2**, and described in detail in the Environmental Impact Statement (EIS) (see **Appendix B**), Submissions Report (see **Appendix D**), Amendment Report (see **Appendix E**) and additional information provided during the Department's assessment of the project (see **Appendix F**).

Table 1 | Main Components of the Project

Aspect	Description
Project summary	<p>The project includes:</p> <ul style="list-style-type: none"> • a generating capacity of approximately 350 MW (AC); • approximately 850,000 solar panels mounted on a single-axis (north-south) tracking system (up to 5 m high) supported by approximately 93 power conversion units, inverters and transformers (up to 2.9 m high); • a battery energy storage system (BESS) with up to 300 MW / 600 MWh capacity located within 4 m high containers (centralised or decentralised configuration); • a communications tower (up to 25 m high) and a substation with up to four transformers, connected to the existing 330 kV transmission line; and • internal access tracks, operations and storage buildings, car parking, water tanks, vegetation screening, security fencing, laydown areas and lighting.
Project area	<ul style="list-style-type: none"> • Site: 1,026 ha. • Development footprint: 682.5 ha.
Site access, road upgrades and access route	<ul style="list-style-type: none"> • Site access would be via an existing private access road off Tarago Road. • Upgrades to the site access road/Tarago Road intersection, including provision of a basic left turn treatment and revisions to the existing basic right turn treatment. • Upgrades to 6.6 km of existing internal tracks and construction of approximately 20 km of new internal tracks, including a new crossing of Wrights Creek and upgrades to the existing Blind Creek crossing. • Access route: Port Botany, Port of Newcastle or Port Kembla via the Hume Highway, Braidwood Road and Bungendore Road-Tarago Road.
Construction, employment and Capital Investment Value	<ul style="list-style-type: none"> • Temporary laydown area with secure compound, site offices, amenities and parking. • Construction period: 12 to 18 month program (peak period of 6 to 9 months) with construction hours of Monday to Friday 7 am to 6 pm, and Saturday 8 am to 1 pm. • Up to 300 construction jobs at peak time and up to 5 operational jobs. • Capital investment value of \$503.7 million.
Operation	<ul style="list-style-type: none"> • The expected operational life of the infrastructure is 35 years. However, the project may involve infrastructure upgrades that could 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 operational life, all above ground infrastructure would be removed and the land rehabilitated.
Subdivision	<ul style="list-style-type: none"> • Subdivision is proposed to separate a lot within the site from the adjacent Capital Wind Farm.
Community Benefits	<ul style="list-style-type: none"> • Voluntary Planning Agreement (VPA) comprising a one-off developer contribution payment to Queanbeyan-Palerang Regional Council of \$250,000 on commencement of operation plus \$49,250 per annum for 20 years (total value of \$1.24 million). • Community benefit sharing scheme providing benefits to 36 non-associated receivers equivalent to \$1,797 per MW (\$629,140) with a further one-off payment of \$150,000 to the Buckingham Estate Community Association. • A payment of \$500,000 to Queanbeyan-Palerang Regional Council for upgrade works to Tarago Road.

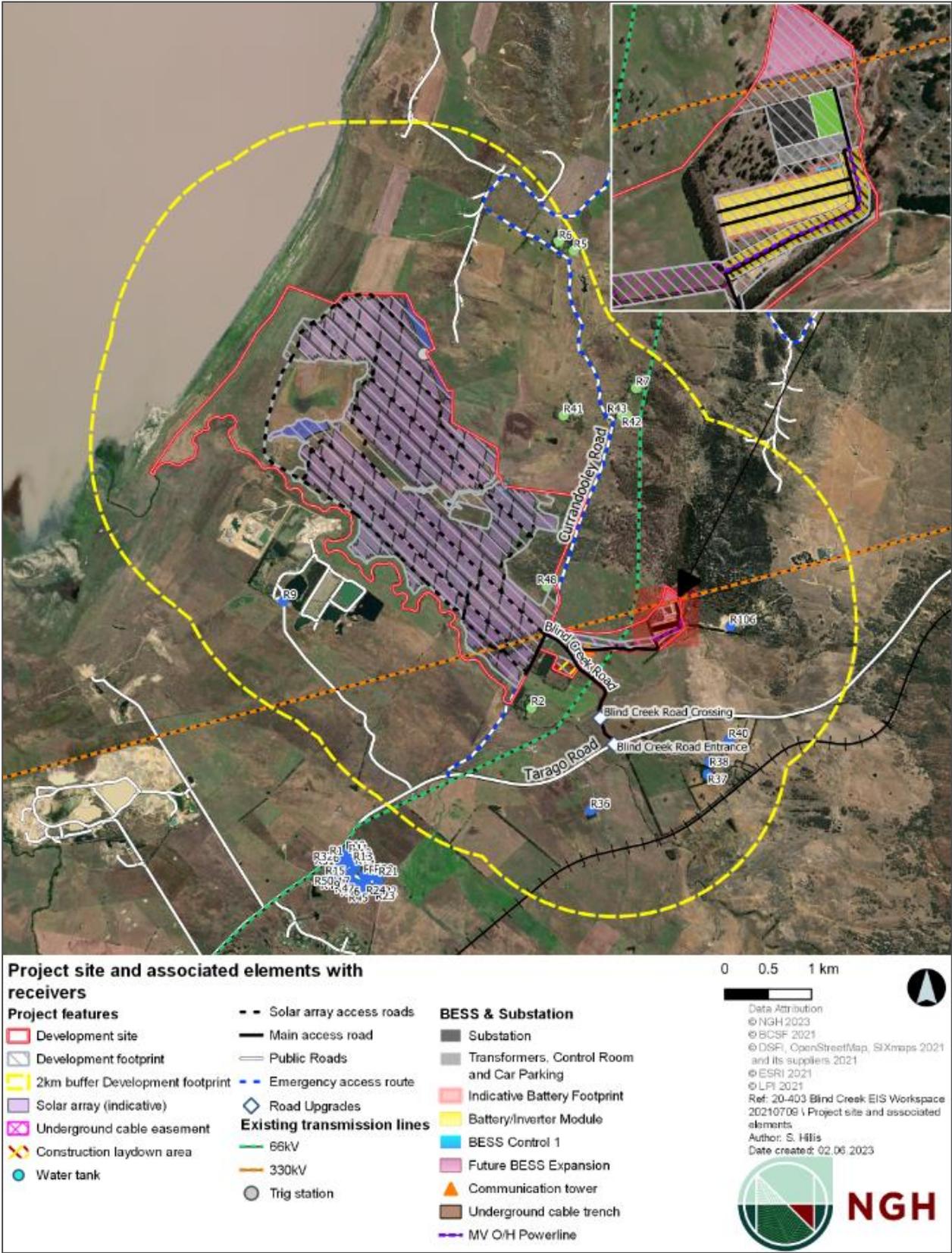


Figure 2 | Project layout

2 Strategic context

2.1 Local Context

The project is located on a 1,026 ha site on the south-eastern shores of Lake George in the South-East and Tablelands region of NSW. The site is zoned RU1 (Primary Production) and C3 (Environmental Management) under the *Palerang Local Environmental Plan 2014* (LEP) and is used for agricultural purposes, including grazing and cropping. The surrounding land is also predominantly zoned RU1 and C3.

The majority of the site has been cleared of native vegetation and contains non-native vegetation used primarily for grazing sheep and cattle, with native woodland vegetation comprising 38.2 ha and wetlands comprising 38.6 ha. The development footprint avoids both these areas.

The site is generally flat with the surrounding landscape predominantly characterised by agricultural uses, two sand quarries (Bungendore Sands and Paragalli Sands), plantation forestry and Capital Wind Farm (see **Figure 1**).

The development footprint is approximately 600 m south-east of Lake George, an ephemeral waterbody that is listed as a wetland of national significance in the Directory of Important Wetlands in Australia and has significant historical, cultural and scientific value.

There are several ephemeral watercourses that traverse the site, including Butmaroo Creek, a sixth order stream that forms the south-western boundary of the development footprint and discharges into Lake George. Blind Creek, a fifth order stream, flows east-west across the site and an unnamed wetland is located to the north with five other dams/ephemeral wetlands located within the site.

Access to the site is via a private road from Tarago Road which is located to the south-east of the site and is a local road under the management of Queanbeyan-Palerang Regional Council.

There are four non-associated residences within 2 km of the site. The closest residence is located 810 m south of the Blind Creek Road entrance to the site and 1.5 km south of the proposed development footprint.

The site also contains 0.12 ha of disused sand mines. There are no mining exploration licences in the site. Bungendore Sands quarry is located 240 m south-west of the site and Paragalli Sands quarry is located 524 m east of the site.

2.2 Other Energy Projects

There are five State significant renewable energy projects within 40 km of the site. Of these, one operational wind farm is located adjacent to the site, and one approved wind farm and one approved solar farm are located adjacent to, and partially within, the site (see **Table 2** and **Figure 3**).

Table 2 | Nearby renewable energy projects

Project	Capacity (MW)	Status	Approximate distance from the project (km)
Capital Wind Farm	141	Operational	Adjacent
Capital 2 Wind Farm	144	Approved	Adjacent/located partly within project site
Capital Solar Farm	50	Approved	Adjacent/located partly within project site
Woodlawn Wind Farm	48	Operational	10
Springdale Solar Farm	100	Approved	40

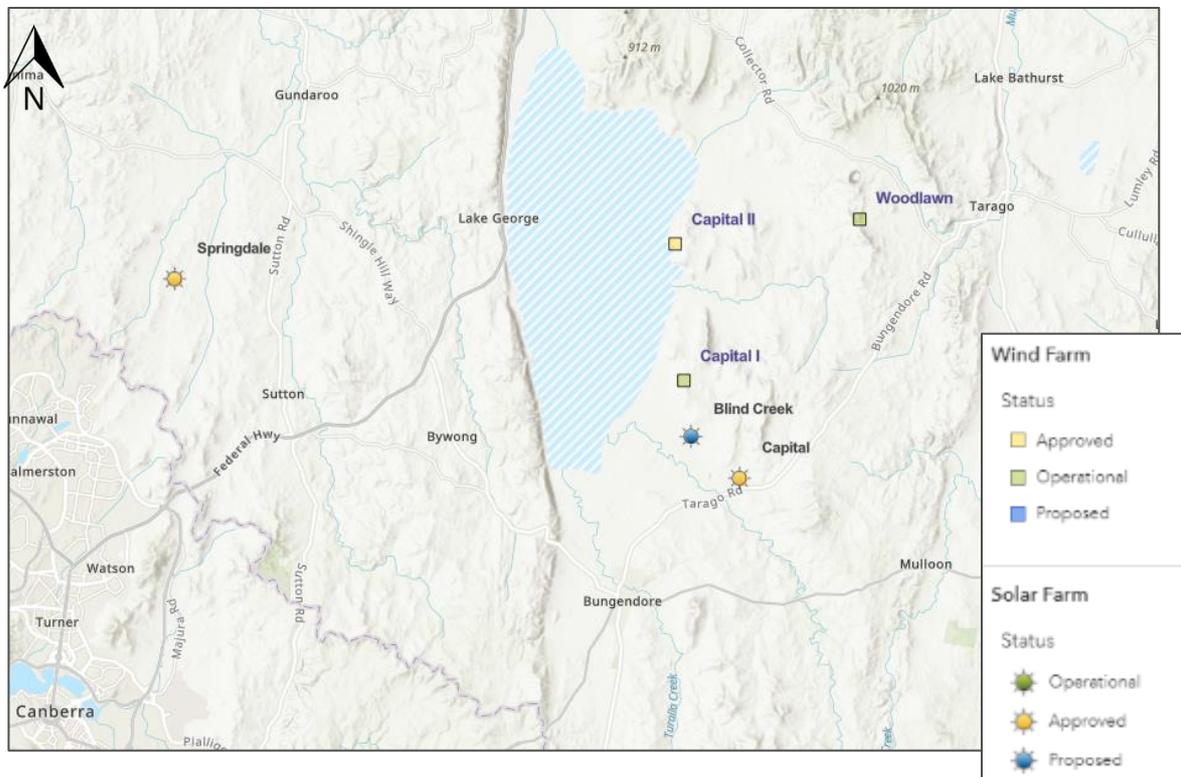


Figure 3 | Nearby renewable energy generation projects

The operational Capital Wind Farm (67 turbines) is located adjacent to the northern boundary of the site. The approved, but not constructed, Capital 2 Wind Farm (41 turbines) is also located adjacent to the northern boundary of the site, with nine of the approved turbines located within the site. BCSF confirm the landowner would not grant proprietary rights for the construction of these turbines in the event the proposed project is approved.

The applicant for the approved Capital Solar Farm, which is located to the east of, and partly within, the site, has advised the Department that the project is not proceeding. BCSF also confirm the landowner would revoke consent for its construction in the event the proposed project is approved.

The potential cumulative impacts are discussed in **section 5.4**.

2.3 Energy Context

The Commonwealth and State energy context is described 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 (AEMO) 2022 Integrated System Plan (ISP)</i>	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.
NSW: <i>Climate Change Policy Framework (2016), Transmission Infrastructure Strategy (2018), Electricity Strategy (2019), Electricity Infrastructure Roadmap (2020), Net Zero Plan Stage 1: 2020 - 2030 (2020) and Implementation update (2022)</i> <i>South East and Tablelands Regional Plan 2036</i>	Relevant aspects of these policy documents include: <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 2030 - notes that all coal fired power plants in NSW are scheduled for closure within the next twenty years - identifies Renewable Energy Zones (REZ) across NSW 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; and - positioning the South East and Tablelands region as a hub of renewable energy excellence.

In 2022 NSW derived approximately 32% of its energy from renewable sources. The rest was derived from fossil fuels, including 62.8% from coal and 4.6% from gas. NSW is one of the nation's leaders in large-scale solar, with 38 major operational projects and 14 under construction or planned to be under construction.

The project's alignment with existing Commonwealth and State policies and strategies are considered in **section 5.1**.

2.4 NSW Solar Guideline

The Department released the *Large-Scale Solar Energy Guideline* in December 2018 to provide the community, industry, and regulators with guidance on the planning framework for assessing large-scale solar projects and identifying the key planning considerations relevant to solar energy development in NSW.

The Guideline was revised in August 2022 following extensive consultation, to ensure the assessment of large-scale solar energy projects continues to be transparent, consistent and supported by the best available information. While the revised guideline does not strictly apply to this project as it was lodged prior to their release, the project is broadly consistent with the principles in the revised guideline.

The 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

The project is classified as State significant development under Section 4.36 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). This is because it triggers the criteria in Clause 20 of Schedule 1 of *State Environmental Planning Policy (Planning Systems) 2021*, as it is development for the purpose of electricity generating works with a capital investment value of more than \$30 million.

Consequently, the Minister for Planning is the consent authority for the development. However, under the Minister's delegation of 9 March 2022, the Director, Energy Assessments, may determine the development application as Queanbeyan-Palerang Regional Council did not object, there were less than 15 objections from the general public and a political donations disclosure statement has not been made.

3.2 Amended Application

In accordance with clause 55 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation), a development application can be amended at any time before the application is determined. Accordingly, BCSF has sought to amend its application, the details of which are summarised in **section 4.3** of this report. Under the delegation from the consent authority (i.e. the Minister for this development), 9 March 2022, the Director, Energy Assessments can agree to amendments to an application.

The Department has accepted the amended application for the following reasons:

- the project amendments have reduced the impacts of the project as a whole;
- the amended application directly responds to the key issues raised in submissions received by the Department during the exhibition of the original application;
- BCSF assessed the impacts of the amended project (see **Appendices D and E**); and
- the Department made the additional information available online and sent it to the relevant agencies for comment.

3.3 Permissibility

The site is zoned RU1 (Primary Production) and C3 (Environmental Management) under the LEP. The LEP was replaced by the *Queanbeyan-Palerang Regional Local Environmental Plan 2022* (QPRLEP) on 1 December 2022. However, as the application was lodged prior to the LEP being repealed, the provisions of the LEP continue to apply (see **Section 5.2**).

The project is permissible because electricity generating works are permissible with consent on any land in a prescribed rural, industrial or special use zone, including land zoned RU1, under clause 2.36 of the *State Environmental Planning Policy (Transport and Infrastructure) 2021* (Transport and Infrastructure SEPP).

In addition, although land zoned C3 is not a prescribed zone under the Transport and Infrastructure SEPP, Section 4.38(3) of the EP&A Act allows development consent to be granted for SSD applications

where the development is partly prohibited. Consequently, the project is permissible with development consent.

3.4 Integrated and Other Approvals

Under Section 4.41 of the EP&A Act, a number of other approvals are integrated into the State significant development approval process, and therefore are not required to be separately obtained for the proposal.

Under Section 4.42 of the EP&A Act, a number of further approvals are required, but must be substantially consistent with any development consent for the proposal (e.g. approvals for any works under the *Roads Act 1993*).

Further authorisations are required under the *Crown Land Management Act 2016*, including a Crown lands licence or easements before infrastructure can traverse Crown lands located within the development footprint.

The Department has consulted with the relevant government agencies responsible for the integrated and other approvals, considered their advice in its assessment of the project, and included suitable conditions in the recommended conditions of consent to address these matters (see **Appendix H**).

3.5 Mandatory Matters for Consideration

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 all of these matters in its assessment of the project, as well as BCSF's consideration of environmental planning instruments in its EIS, as summarised in **section 5** of this report. The Department has also considered relevant provisions of the environmental planning instruments in **Appendix G**.

4 Engagement

4.1 Department's Engagement

The Department publicly exhibited the EIS from 7 June 2022 until 7 July 2022, advertised the exhibition in the press, and notified surrounding landowners in proximity to the site. The Department visited the site and surround on 8 December 2022 and met with three landowners.

The Department also consulted with Queanbeyan-Palerang Regional Council, Goulburn Mulwaree Council and relevant government agencies throughout the assessment. The Department notified and sought comment from Transgrid and Transport for NSW (TfNSW) in accordance with the Transport and Infrastructure SEPP, as discussed further in **sections 4.5** and **5.4**.

4.2 Submissions and Submissions Report

During the exhibition period of the EIS, the Department received 45 unique public submissions, consisting of 4 objections, 38 in support and 3 comment. A late submission containing 11 signatures, representing the owners of seven residences and two undeveloped lots in the area, was also received objecting to the project.

Advice was also received from 13 government agencies and a submission received from Queanbeyan-Palerang Regional Council. A submission from Goulburn Mulwaree Council was also received after the exhibition period.

Full copies of the agency advice and public submissions are attached in **Appendix C**.

BCSF provided a response to all matters raised in submissions on the project (see **Appendix D**) and has also provided additional information during the Department's assessment (see **Appendix F**).

4.3 Amended Application

Following consideration of submissions on the project, BCSF amended its application in December 2022, as detailed in the Amendment Report (see **Appendix E**). The amended application includes:

- an overall reduction in the maximum development footprint from 700 ha to 682.5 ha;
- changes to the site access road/Tarago Road intersection upgrades, including extending the length of the basic right turn treatment;
- removal of solar panels from within a 12.2 ha flow path corridor connecting Wrights Creek and the ephemeral wetland, and above Reduced Level (RL) 691 m on or bordering Lot 17 DP 535180;
- restoration and protection of a 33.9 ha breeding habitat for the White Fronted Chat;
- a reduction in the distance between panels from 5.75 m to 5.25 m and an increase in the number of inverter stations from 85 to 93;
- changes to the proposed subdivision of Lot 17 DP 535180;
- an increase in proposed landscaping; and
- a reduction in estimated water construction requirements from 250 megalitres (ML) to 150 ML.

Despite the proposed amendments, the generating capacity of the project would remain unchanged at 350 MW.

The Department provided the Amendment Report to relevant government agencies for review and comment and made it available on the Department’s website. As the project amendments refer to a reconfiguration and reduction in the site footprint within the previously provided project site, the Department did not exhibit the Amendment Report.

4.4 Summary of Submissions

The Department received 45 submissions (4 objections, 38 in support and 3 comment) from the public, 39 of which were from residents within the Queanbeyan-Palerang LGA. Five submissions raised concerns about the project and are from landowners in the district and the Tarago and District Progress Association.

The objections raised the following key concerns:

- loss of agricultural land;
- adverse traffic and road safety impacts;
- visual impacts; and
- impacts on neighbouring residential properties from increased traffic during construction.

The late submission objecting on behalf of 11 neighbouring landowners raised concerns of visual and bushfire impacts.

The 38 supporting submissions, the majority from within the Queanbeyan-Palerang LGA, included views that renewable energy is important for NSW energy needs, the project is well located and includes co-located sheep grazing, it would create direct and indirect jobs, a community benefits sharing scheme is proposed, and that there has been a high level of community consultation on the project.

4.5 Summary of Advice Received from Government Agencies

Queanbeyan-Palerang Regional Council and the government agencies provided comments on key aspects and recommended conditions of consent. A summary of the key matters raised in the government agency submissions and subsequent advice is provided in **Table 4**.

Table 4 | Summary of Council and Agency Advice

Agency	Key issues	Section in report
Queanbeyan-Palerang Regional Council	<p>Provided comments and recommended conditions relating to the intersection upgrade, heavy vehicle movements to occur outside school bus services on Tarago Road, preparation of an Employment and Accommodation Strategy, and landscaping.</p> <p>Also requested a monetary contribution for upgrade works to Tarago Road.</p>	5.4

Agency	Key issues	Section in report
Goulburn Mulwaree Council (late submission)	Raised road and traffic issues. Confirmed no further comments following review of the Submissions Report, Amendment Report and additional information. Council requested road maintenance be considered.	5.4
TfNSW	Provided recommended conditions following the provision of further information regarding access arrangements, construction vehicle routes and the impacts and mitigation of additional traffic generation during construction.	5.4
Department's Biodiversity, Conservation and Science Directorate (BCS)	Provided recommended conditions regarding biodiversity offsets and the preparation of a biodiversity management plan.	5.4
Department's Water Group (DPE Water)	Requested compliance with the <i>Guidelines for Controlled Activities on Waterfront Land</i> (NRAR 2018), including the design of the riparian corridor for Wrights Creek.	5.4
Heritage NSW	Confirmed the Aboriginal Cultural Heritage Assessment is adequate and concurs with its recommendations. Requested a Cultural Heritage Management Plan be prepared in consultation with Heritage NSW and Registered Aboriginal Parties (RAPs).	5.4
Department of Primary Industries – Agriculture (DPI Ag)	Confirmed there would be no impact on agricultural land from the proposal and recommended a condition to ensure sheep are able to graze underneath the panels.	5.4
Department of Primary Industries - Fisheries	Confirmed the works will have minimal impact on the aquatic environment and provided recommendations to ensure fish passage is maintained in relevant waterways.	5.4
Rural Fire Service (RFS)	Raised no concerns subject to compliance with the proposed bushfire mitigation measures.	5.4
Fire and Rescue NSW	Recommended preparation of a Fire Safety Study and Emergency Response Plan.	5.4
Crown Lands Group (DPI Crown Lands)	Noted any Crown road required for access will need to be transferred to Queanbeyan- Palerang Regional Council or an application made to close and purchase the road and an easement is required where infrastructure traverses Crown roads.	5.4

5 Assessment

The Department has undertaken a comprehensive assessment of the merits of the project. This report provides a detailed discussion of the key issues, namely energy transition (**Section 5.1**), land use compatibility (**Section 5.2**) and visual impacts (**Section 5.3**).

The Department has also considered the full range of potential impacts associated with the project and has included a summary of the conclusions in **section 5.4**. A list of the key documents that informed the Department's assessment is provided in **Appendix A**.

5.1 Energy Transition

The project aligns with a range of national and state policies, which identify the need to diversify the energy generation mix and reduce the carbon emissions intensity of the grid while providing energy security and reliability.

With a generating capacity of 350 MW, the solar farm would generate enough electricity to power about 133,500 homes. This is consistent with the *NSW Climate Change Policy Framework* of achieving net zero emissions by 2050. The inclusion of a battery facility would enable the project to store solar energy for dispatch to the grid outside of daylight hours and/or during peak demand, increasing grid stability and energy security. As such, the project would play an important role in:

- increasing renewable energy generation and capacity;
- firming the grid by including 300 MW / 600 MW-hour energy storage; and
- contributing to the transition to a cleaner energy system as coal fired generators retire.

The project is in an area with direct access to the transmission network with available capacity and abundant solar resources on land where solar development is permissible on RU1 zoned land with consent under the Transport and Infrastructure SEPP.

5.2 Compatibility of Proposed Land Use

Provisions of the LEP

The site is located within the RU1 Primary Production and C3 Environmental Management zones under the LEP. While a solar farm is permitted in the RU1 zone under the Transport and Infrastructure SEPP, the Department notes a solar farm would otherwise be a prohibited land use in this zone under a strict reading of the LEP. However, based on a broader reading of the LEP, and consideration of the objectives of the RU1 zone and other strategic documents for the region, the Department considers that there is no clear intention to prevent the development of a solar farm on the site.

Firstly, the LEP expressly references the Transport and Infrastructure SEPP and acknowledges that electricity generating works are regulated by the Transport and Infrastructure SEPP, rather than the LEP. As described above, a solar farm is permitted with consent on land zoned RU1 under the Transport and Infrastructure SEPP.

Secondly, the Department considers the project is consistent with the objectives of the RU1 zone under the LEP, particularly by:

- encouraging diversity in primary industry enterprises and systems appropriate for the area;
- minimising fragmentation and alienation of resource lands;
- minimising the impact of any development on the natural environment; and
- allowing for non-agricultural land uses that will not restrict the use of other land in the locality for agricultural purposes.

Although land zoned C3 is not a prescribed zone under the Transport and Infrastructure SEPP, the EP&A Act allows development consent to be granted for SSD applications where the development is partly prohibited. The Department considers the project is consistent with the relevant objectives of the C3 zone under the LEP, particularly by:

- designing the development footprint to reduce and minimise impacts on Aboriginal heritage and preserve areas of highest value;
- being visually compatible with the landscape;
- promoting ecologically sustainable development; and
- minimising the impact of the development on the natural environment.

Although the provisions of the LEP rather than the more recent QPRLEP apply to the project (see **Section 3.3**), the RU1 and C3 zoning of the site remain unchanged and the proposal satisfies the only additional provision in the QPRLEP for the C3 zone relating to protecting water quality (see **Section 5.4**).

The locality supports a range of rural land uses including agricultural, sand quarries and large lot residential, and the proposal would add a new infrastructure development with minimal off-site environmental impacts, encouraging renewable energy development in the area.

In addition, Queanbeyan-Palerang Regional Council's strategic planning documents specifically encourage the provision of renewable energy across the LGA. The *Queanbeyan-Palerang Community Strategic Plan 2018-2028* includes the adoption of sustainable and renewable energy as a strategic priority and the location of such projects in rural areas. The *Bungendore Structure Plan 2048* also includes potential future residential areas to the north of Bungendore, approximately 3 km from the site at the closest point.

Further, the development is consistent with key Government strategic planning guidance, including the *South East and Tablelands Regional Plan 2036*, which includes a direction to position the region as a hub of renewable energy excellence.

In addition, Queanbeyan-Palerang Regional Council's submission does not raise specific concern about the use of the RU1 or C3 portions of the site.

Whilst the Department considers that the project is compatible with the LEP for the above reasons, the project's impacts on agricultural land are further discussed below.

Potential Impacts on Agricultural Land

One community submission objecting to the project raised concerns about establishing a solar farm on productive agricultural land.

Most of the site and development footprint (92%) comprises soils that are classified as Class 6 (low capability land) under the *Land and Soil Capability Mapping in NSW* (OEH, 2017), indicating agricultural uses have very high limitations and are largely restricted to low impact uses such as grazing and forestry. Class 5 (moderate-low capability land) covers the remainder of the site, indicating agricultural uses are largely restricted to low-moderate impact uses such as grazing and some horticulture (see **Table 5**).

Table 5 | Land capability classes

Class	Site (ha)	Development footprint (ha)
5	81.3 (7%)	53.33 (7.8%)
6	944.6 (93%)	629.17 (92.2%)
Total	1,025.9	682.5 (100%)

To reduce the potential for impact on agricultural land, BCSF has committed to continuing agricultural uses on the site, including ensuring the solar panels are of sufficient height to allow sheep to graze underneath them, and development of a groundcover management plan.

The Department considers that the impacts are acceptable subject to BCSF's commitments, which also include a post-approval soil survey and an environmental management plan as recommended by DPI Agriculture.

The Department considers that the proposal represents an effective and compatible use of the land within the region and that the site is suitable to accommodate the development.

5.3 Visual

One submission objected to impacts to views of Lake George from their property. Queanbeyan-Palerang Regional Council also requested the Department consider view impacts to potential future residential development on the northern side of Bungendore as identified in the *Bungendore Structure Plan 2048* and from the Anderson VC rest area and Weereewa Lookout on the western side of Lake George. A late submission with 11 signatories, also raised visual impact concerns.

There are four non-associated residential receivers (R36, R37, R38 and R40) located within 2 km of the development footprint, the closest being R36 which is 1.5 km to the south-east (see **Figure 4**). A further 24 non-associated receivers are located within 4 km of the development footprint, the majority within the Buckingham Estate to the south-west (see VP07 in **Figure 4**).

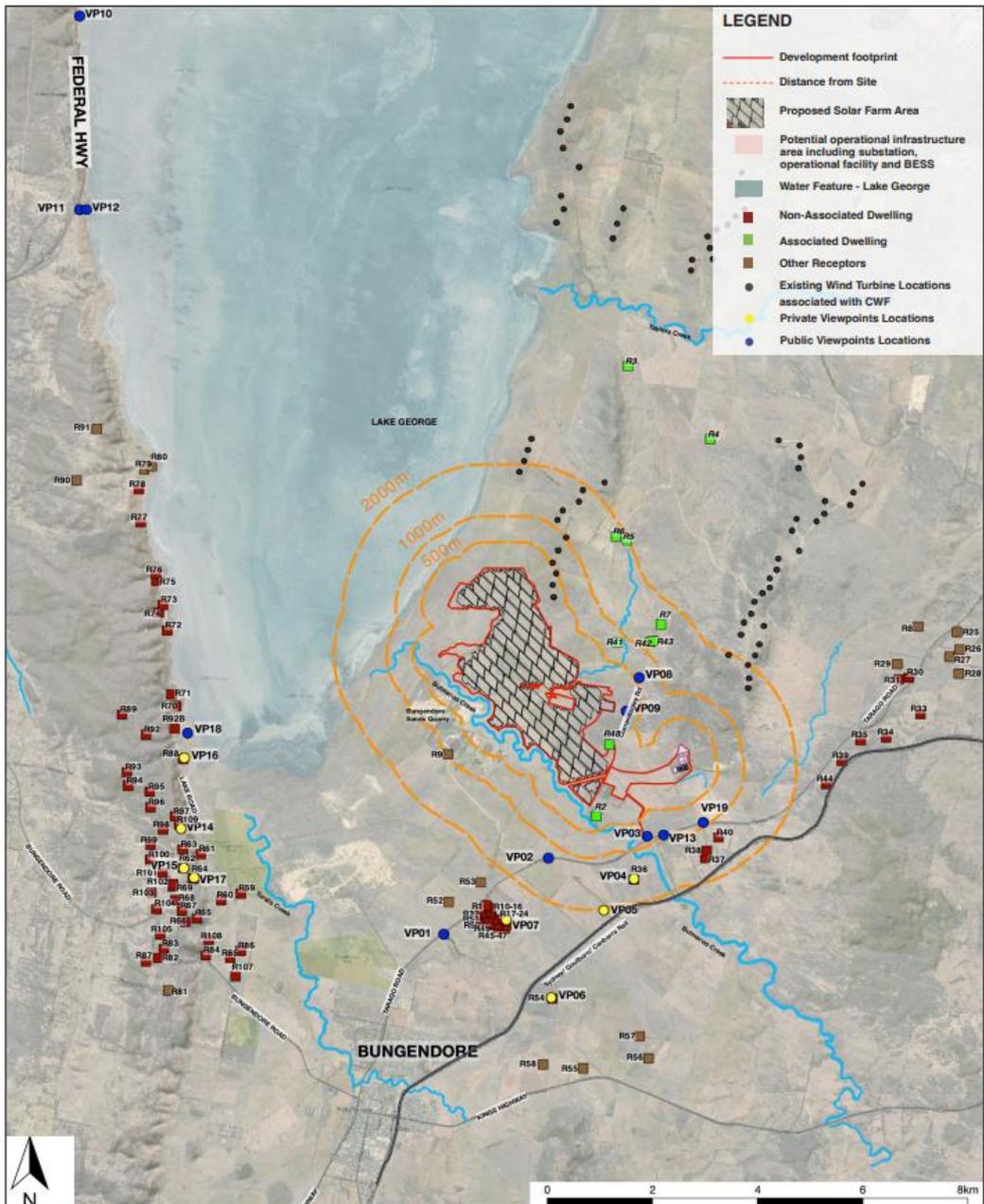


Figure 4 | Location of receivers

Visual impact assessment

BCSF provided a Landscape and Visual Impact Assessment (visual report) with the EIS and an updated version with the Submissions Report. Of the 19 representative viewpoints assessed, the visual report concluded 13 would have a visual impact rating of low or negligible, five would be moderate-low and one would be moderate. The moderate viewpoint is located off Tarago Road and is a public viewpoint only (ie. no residential receiver). Of the five moderate-low ratings, two are from public road viewpoints and three are from elevated receivers located over 5 km to the west of the site.

Overall, the visual report concludes existing landscape features, including topography and existing and proposed vegetation, would suitably screen the project from the majority of locations, and all non-associated receivers within 2 km of the site. In addition, proposed landscaping would also reduce any visual impacts to receivers located more than 2 km from the site.

Mitigation

BCSF proposed visual mitigation, including

- an overall reduction in the maximum development footprint and the removal of panels above RL 691 m on or bordering Lot 17 DP 535180 following exhibition in response to submissions;
- landscape screen mitigation planting is proposed along the south-eastern, south-western and western sides of the site to further reduce the visual impact of the project by breaking up views from these directions; and
- maintaining vegetation around the proposed substation to screen the views from adjacent receivers.

Consideration

The site is generally flat, cleared agricultural land used primarily for grazing with pockets of wetlands and mature vegetation adjacent to Lake George and sand quarrying operations located directly to the west. The scenic quality of the site is therefore low. However, when viewed from residences located on undulating hills to the south and south-west, the site forms part of a broader rural landscape with views to Lake George resulting in a moderate to high scenic quality.

The Department recognises that the introduction of the proposed solar farm to a rural landscape would result in a material change to the local landscape. However, the Department notes the solar panels would be relatively low lying (up to 5 m) and the proposed maintenance buildings and substation would be similar in size to agricultural structures commonly found in the area. In addition, wind turbines, transmission lines, power poles and communication towers are part of the existing landscape character of the area.

The Department's consideration of the visual impact of the project in the direction of relevant non-associated residences, vantage points and Tarago Road is provided below.

East

Non-associated receivers to the east are located further than 2 km from the site and have no views of the project due to intervening topography.

South-East

Of the nine locations represented by the 11 signatories in the late submission, two are from landowners of residences (R36 and R40) to the south-east with a further three signatories from residences located over 5 km from the site (see **Figure 4**).

Residence R36 which is located at a similar elevation to the site and illustrates minimal elements of the project would be visible (see **Figure 5**), including part of the laydown area and the communications tower. To the east of the laydown area, the project would be screened by existing vegetation and the substation, with the exception of some transmission poles, would be located behind existing vegetation that would remain as part of the development. Proposed landscape planting along the south-eastern perimeter of the site would further mitigate any potential visual impacts.

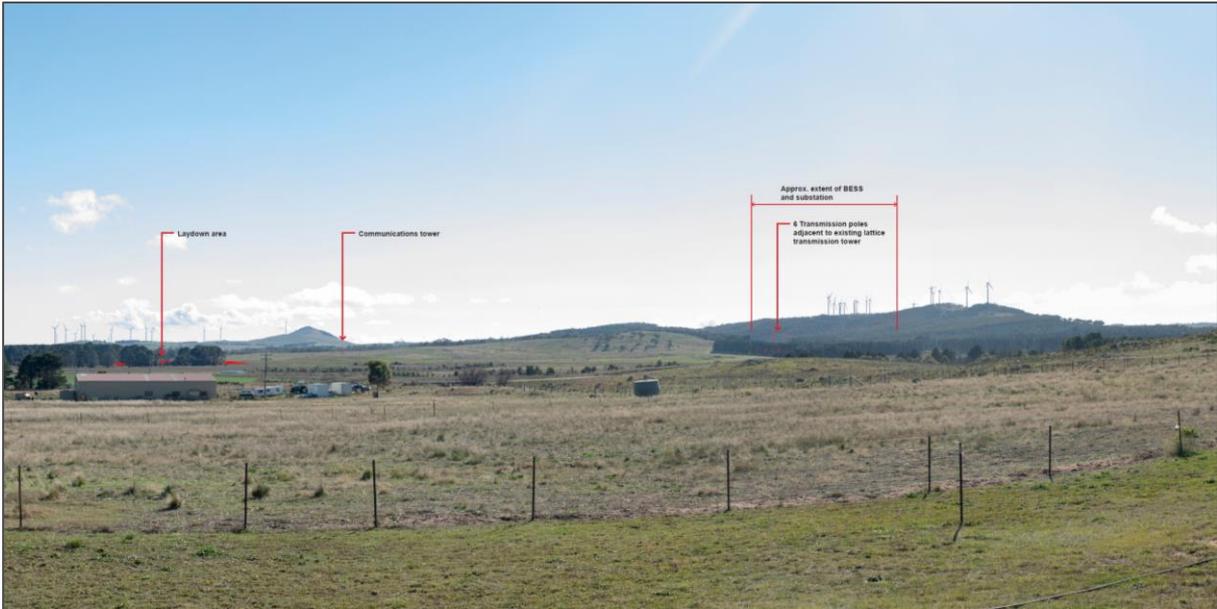


Figure 5 | View from R36 looking north-west

South-West

An objection was received from a residence located in Greenhill Lane over 6 km to the south of the site and due to its distance, was not allocated a residence number. The Department visited the property and notes that although the visual sensitivity of this location is high due to the prominent (ephemeral) waterbody in the landscape, the potential visual magnitude of the project would be very low due to the distance from the project, the low-lying development footprint avoiding hills, the minor proportion of the overall view impacted and the location of project infrastructure such as the BESS and substation behind existing vegetation (see **Figure 6**). In addition, any potential view impacts would be further mitigated by the proposed additional vegetation screening along the south-western side of Butmaroo Creek. The Department therefore considers the overall visual impact to be low.

Of the 11 signatories in the late submission, one is from a landowner of an undeveloped lot within 2 km of the site (656 Tarago Road) with a further three from landowners of residences/an undeveloped lot located more than 5 km from the site (see **Figure 4**).

Although there is no residence at 656 Tarago Road, the visual report included a viewpoint (VP05) taken from the highest point on the lot (approximately 27 m above the ground level of the project) located approximately 2 km from the project which identified existing dense vegetation along the north-eastern boundary of the lot and adjacent to Tarago Road, plus intervening topography, would significantly screen views towards the site. Should a residence be located on the lot, the Department considers the visual sensitivity to be moderate and the magnitude and overall potential visual impact from this location to be very low.

The Department considers the impact of the project on views from receivers over 2 km away would be low to very low due to distance, intervening vegetation (existing and proposed), topography and overall low scenic quality.



Figure 6 | View from Greenhill Lane receiver looking north

With regard to potential future residential development on the northern side of Bungendore identified in the *Bungendore Structure Plan 2048* for future investigation, the Department notes this area is located over 4 km to the south-west of the site and any views would be significantly screened by existing and proposed vegetation and topography.

West

Receivers and public vantage points (including the Anderson VC rest area and Weereewa Lookout) located on the western shoreline of Lake George and elevated locations beyond (approximately 155 m above the ground level of the project) would have views of the project and existing adjacent quarry and wind farm, with Lake George in the foreground resulting in a generally high scenic quality. However, given distances of over 4 km, the Department considers the visual magnitude of the project would be very low resulting in an overall low visual impact. Proposed landscaping on the western side of the site would further reduce the visual impact of the project.

Tarago Road

Visual impacts on motorists travelling along Tarago Road would be largely obscured by established roadside vegetation, with the exception of a small section near the proposed site access. Motorist's views from this location would be fleeting and are not considered to be significant. Although more substantial views of the project would be available from Currandooley Road to the east, this is a low use gravel road used to access the Capital Wind Farm and some associated residences and has low visual sensitivity. Landscaping is also proposed on the boundary of the site and Currandooley Road.

Glint and glare

While photovoltaic panels are designed to absorb rather than reflect sunlight, galvanised steel used for the solar panel framework has the potential to generate glare or reflection, however this diminishes over time. The Department considers the setback distances from nearby receivers, topography and intervening vegetation would shield or minimise potential glare and reflection impacts, which would be temporary in any case.

Conclusion

The Department considers the project would be substantially screened by existing vegetation and topography from residences within 2 km, reduction in the maximum development footprint and the removal of panels at higher elevations (above RL 691) and landscape screen mitigation planting is proposed along the south-eastern, south-western and western sides of the site to further reduce the visual impact of the project by breaking up views from these directions. This would result in nil to very low visual impacts from neighbouring residences.

The Department also notes that as a result of the project, impact to the broader landscape would be less as it would partially occupy land that may otherwise contain nine wind turbines as part of the approved Capital 2 Wind Farm.

The Department has recommended a Detailed Landscaping Plan be developed to the satisfaction of the Planning Secretary, including measures to be implemented to ensure the proposed vegetation buffers achieve the expected level of visual mitigation, as well as a program to monitor its effectiveness.

Further conditions are also recommended to minimise the off-site visual impacts of the development, including potential glare or reflection, external lighting is minimised and complies with Australian Standards, and that the visual appearance of all ancillary infrastructure, including paint colours, blends in as far as possible with the surrounding landscape.

Subject to landscape screening and other recommended mitigation measures, the Department concludes the visual impacts of the project on the surrounding residences and road users are acceptable.

5.4 Other Issues

The Department's consideration of other issues is summarised in **Table 6**.

Table 6 | Summary of other issues raised

Findings	Recommendations
Biodiversity	
<ul style="list-style-type: none"> • The 1,026 ha site predominantly comprises cleared agricultural land comprising several large paddocks. A total of 642.9 hectares of native vegetation (grasslands) in very poor condition is proposed to be cleared together with some stands of planted exotic pine and elm trees. • Two plant community types and associated Threatened Ecological Communities (TECs) were identified within the development footprint. However, neither area has sufficient vegetation integrity to generate any offsets under the <i>Biodiversity Conservation Act 2016</i> (BC Act). • An area of <i>Monaro Tableland Cool Temperate Grassy Woodland in the South Eastern Highlands Bioregion</i> TEC (critically endangered under the BC Act) was identified within the site but has been avoided by the development footprint. • The White-fronted Chat (listed as vulnerable under the BC Act) was observed utilising areas of non-native vegetation (Scotch Thistle) during site surveys, indicating the presence of suitable breeding habitat. Surveys for the extent of Scotch Thistle indicated approximately 33.86 ha is proposed to be cleared. BCS recommended that an equivalent area of suitable habitat should be established within the site to offset the loss of breeding habitat. • No serious and irreversible impact candidates would be impacted by the project. In addition, BCSF considered there would be no impacts on Matters of National Environmental Significance were identified and no referral under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> was made. • BCS have raised no concerns noting direct impacts from the project are entirely isolated to non-native vegetation in a highly disturbed, agricultural landscape. • No ecosystem credits are generated because the vegetation is in poor condition. • With these measures, both BCS and the Department consider the project is unlikely to result in a significant impact on the biodiversity values of the locality. 	<ul style="list-style-type: none"> • Prepare and implement a Biodiversity Management Plan, including the restoration of White-fronted Chat breeding habitat.
Heritage	
<u>Aboriginal Cultural Heritage</u>	
<ul style="list-style-type: none"> • A survey of the site undertaken in consultation with RAPs identified 38 previously unrecorded Aboriginal cultural heritage surface sites, including 11 isolated finds and 27 artefact scatters. Subsurface excavation identified a further 21 Aboriginal cultural heritage sites. 	<ul style="list-style-type: none"> • Ensure the development does not cause any direct or indirect impacts on the previously identified heritage items.

Findings

- 18 previously registered Aboriginal Heritage Information Management System sites were identified within the study area.
- BCSF has committed to salvaging and relocating 38 sites and avoiding impacts to the remaining 32 sites.
- BCSF has also committed to conducting representative subsurface salvage excavations within sensitive archaeological landforms prior to ground disturbance works.
- Consultation with RAPs informed the project design and management measures.
- With these measures, the Department and Heritage NSW consider the project would not significantly impact the heritage values of the locality.

Historical Heritage

- No heritage items listed on Commonwealth, National or State registers are located within the site.
- There are two locally listed heritage items within the vicinity of the site, one located 2.4 km north of the site, and one located 1 km east of the site. The project would not impact the physical and visual curtilage or historic heritage values of these properties.
- Queanbeyan-Palerang Regional Council raised no concerns regarding historical heritage.
- Noting the above, the Department is satisfied the project would not have any adverse impacts on local or State heritage items in the area.

Traffic and Transport

- The project has the potential to impact local and State roads, primarily during construction.
- Two community submissions expressed concerns about traffic impacts, including that the Traffic Impact Assessment is based on inaccurate information and lack of consultation resulting in incorrect recommendations, and potential damage to local roads from construction vehicles.
- Queanbeyan Palerang Regional Council also expressed concern about the potential impacts of project traffic.
- The primary heavy vehicle transport route during construction is from Port Botany, Port of Newcastle or Port Kembla via the Hume Highway, Braidwood Road and Tarago Road-Bungendore Road. Tarago Road is a regional classified road managed by Queanbeyan-Palerang Regional Council. Site access would be via an existing private access road off Tarago Road.
- An increase in traffic volumes would occur during the approximate 12 to 18 month construction period, with a peak period of 6 to 9 months, with up to 35 heavy vehicles and 50 light vehicle movements a day expected during the peak period. A total of 22 heavy vehicles requiring escort movements are also required. Operational traffic would be infrequent and generally minimal.

Recommendations

- Cease works and notify the NSW Police and BCS if human remains are identified over the life of the project.
- Prepare and implement a Cultural Heritage Management Plan, including salvage methodology and procedures for unexpected finds, in consultation with RAPs and Heritage NSW.

- Complete the relevant road upgrades to the intersection of Tarago Road and the site access road.
- Restrict the number of vehicles during construction, upgrading and decommissioning to the peak volumes identified.
- Prepare and implement a Traffic Management Plan, including provisions for dilapidation surveys and exclusion of heavy vehicle movements during school bus operating times on Tarago Road
- Provide a minimum payment of \$500,000 to Queanbeyan-Palerang Regional

Findings

- Overall, the proposed transport route has sufficient capacity for the predicted traffic generation.
- Queanbeyan-Palerang Regional Council considered that the Tarago Road pavement has existing issues due to current heavy vehicle loads and is considering upgrades more broadly. The BCSF assessment of Tarago Road outlined patching of areas of Tarago Road. As Queanbeyan-Palerang Regional Council is considering more substantial upgrades to accommodate a significantly longer design life, it requested BCSF provide a monetary contribution to upgrade a section of Tarago Road and BCSF has agreed to provide \$500,000 to Queanbeyan-Palerang Regional Council for it to undertake the upgrade.
- Queanbeyan-Palerang Regional Council also requested conditions relating to the intersection upgrade design.
- A new Basic Left Turn treatment (northbound) and an extension to the existing basic right turn treatment (southbound) is required at the access road/Tarago Road intersection.
- Tarago Road within Goulburn Mulwaree Council area does not require road upgrades, however the Department has included recommended conditions for a dilapidation survey and repair of any development related damage.
- With the implementation of the road upgrades and implementation of a comprehensive Traffic Management Plan, the project would not result in significant impacts to the road network capacity, efficiency or safety.

Recommendations

Council at least three months prior to commencement of construction for upgrade works to Tarago Road.

Noise

- There is potential for noise impacts during construction activities, operation and from road traffic.
 - Noise generated by the proposed construction, upgrading and decommissioning activities are predicted to be well below the 'highly noise affected' criterion of 75 dB(A) in the EPA's *Interim Construction Noise Guideline* (the ICNG) at all non-associated residential receivers and construction would be limited to daytime hours. Construction noise would also not exceed the noise management level of 45 dB(A) for all non-associated residential receivers.
 - The operational noise levels are also predicted to be below the lowest intrusive criteria in the *NSW Noise Policy for Industry* (EPA, 2017) at all non-associated residential receivers.
 - BCSF has committed to implementing noise mitigation work practices, including preparing a noise management plan.
 - Road traffic noise during the construction and operation of the project would comply with the relevant criteria in the EPA's *Road Noise Policy*.
 - Given the relative distance from other developments, there would be negligible cumulative noise impacts.
 - The Department has recommended conditions requiring BCSF to minimise noise during construction, upgrading or decommissioning, and limiting operational noise.
- Minimise the noise generated by any construction, upgrading or decommissioning activities on site in accordance with best practice requirements outlined in the ICNG.
 - Comply with the noise management levels as derived from the *NSW Noise Policy for Industry* (EPA, 2017) at any non-associated residence
 - Restrict construction hours to Monday to Friday 7 am - 6 pm, and Saturday 8 am - 1 pm unless inaudible at non-associated receivers.

Findings

Recommendations

Water

Surface water and flooding

- The site is currently subject to relatively minor levels of flooding with the extent and potential hazard increasing in proximity to Butmaroo and Blinds Creeks.
- BCSF undertook a flooding assessment which identified there would be no significant impact on flood behaviour for the 1% annual exceedance probability event, due to most of the proposed infrastructure being located outside the high hazard areas adjacent to the creeks. In addition, increased velocity would be minor and should not result in any increased erosion. The flooding assessment recommended measures including locating all electrical equipment, including PV modules, a minimum of 500 mm above the modelled 1% AEP flood level and avoid high hazard areas.
- A designated 80 m wide flow path through the site, clear of solar arrays, has also been provided to provide an unimpeded path flow downstream connecting Wrights Creek to the ephemeral wetland.
- The Department notes the major flow paths through the site are maintained and the proposed development would not be adversely impacted by flooding subject to the implementation of recommended flood mitigation measures. In addition, the proposed would result in minimal change in existing flood behaviour on the site (flow path and flood levels).
- Any erosion and sedimentation risks associated with the project can be effectively managed by following the *Managing Urban Stormwater: Soils and Construction* (Landcom, 2004). The Department has included these requirements in the recommended conditions and to prepare a Soil and Water Management Plan.

Groundwater

- Due to the relatively shallow depth of local groundwater resources, minimal excavation for slab footings and limited excavation depths (approximately 2.4 m) is proposed.
- The project is therefore not expected to adversely affect groundwater.

Fish habitat

- The Department and DPE Water are satisfied the project would result in minimal impact to fish habitat subject to the protection of buffer zone widths to riparian corridors and that waterway crossings incorporate best practice design features to maintain fish passage.

Water supply

- The project would require up to 150 megalitres (ML) of non-potable water and 1 ML of potable water during over a 12 to 18 month construction period. Bulk water tankers would be used to supply the potable water. Non-potable water may be obtained from various sources, including potentially aquifer water from an existing licence holder in the area or an existing dam owned by the BCSF which has a 40 ML capacity.

- Design, construct and maintain the project to reduce impacts on surface water and flooding at the site.
- Ensure the project is constructed and maintained to avoid causing erosion on site and minimise any soil erosion in accordance with *Managing Urban Stormwater: Soils and Construction* (Landcom, 2004)..
- Require compliance with *Guidelines for Controlled Activities on Waterfront Land* (NRAR, 2018), *Guidelines for Riparian Corridors on Waterfront Land* (DPI Water, 2012), *Guidelines for Watercourse crossings on Waterfront Land* (Office of Water) and DPI Fisheries *Policy for Guidelines for Fish Friendly Water Crossings* (2004).
- Ensure there is sufficient water for all stages of the project, and if necessary, adjust the scale of the development to match available water supply.
- Develop a Soil and Water Management Plan.

Findings

- Approximately 200 kilolitres of non-potable water would be required annually during operation which would be supplied from rainwater harvesting and supplemented by a commercial supplier if required during periods of drought.
- Subject to the recommended conditions, the Department considers that the project would not result in significant impacts on water resources.

Recommendations

Subdivision

- BCSF proposes to subdivide Lot 17 DP 535180 to create a 40 ha lot within the site, separate from the adjacent Capital Wind Farm. The proposed lot would be consistent with the LEP minimum lot size of 40 ha and is therefore permissible.
- Queanbeyan-Palerang Regional Council raised no concerns with the proposed subdivision.
- Subdivide the lot in accordance with the requirements of the EP&A Act, EP&A Regulation and the *Conveyancing Act 1919* (NSW).

Hazard and Risks

- One public submission raised concerns regarding increased bushfire impacts.
- The entire site is mapped as bushfire prone land. BCSF prepared a bushfire impact assessment and would be required to comply with the RFS's *Planning for Bushfire Protection 2019*.
- The Department considers that bushfire risks can be suitably controlled through the implementation of standard procedures and recommendations made by FRNSW and RFS, including:
 - measures including asset protection zones (APZs);
 - preparation of a Fire Safety Study in consultation with FRNSW; and
 - development of a comprehensive Emergency Response Plan.
- BCSF undertook a preliminary risk screening in accordance with *State Environmental Planning Policy (Resilience and Hazards) 2021*.
- The screening concluded that the transport and storage of hazardous materials for the project would not exceed the relevant risk screening thresholds and the project is not considered to be potentially hazardous.
- One medium risk related to fire events was identified and the risk can be mitigated by preparation of a Fire Safety Study and an Emergency Plan.
- BCSF have committed to preparing a Fire Safety Study and an Emergency Plan for the project.
- The project would comply with the *International Commission on Non-Ionizing Radiation Protection (ICNIRP)* guidelines for electric, magnetic and electromagnetic fields.
- The BESS associated with the development must not exceed a total capacity of 300 MW across the site and must be installed in an arrangement consistent with the EIS.
- Ensure that the development complies with the relevant asset protection requirements in the RFS's *Planning for Bushfire Protection 2019* and Standards for APZs.
- Ensure the defensible space and solar arrays are managed as an APZ and the development is suitably equipped to respond to fires, including water supply tank and appropriate connectors.
- Prepare a Fire Safety Study and an Emergency Plan for the development.
- All chemicals, fuels and oils to be stored and handled in accordance with Australian Standards and NSW

Findings

- Subject to the recommended conditions, the Department, FRNSW and RFS are satisfied that risks associated with the project would be minimal.

Recommendations

- Environment Protection Authority requirements.

Community Benefit

- The Department considers that, in addition to its contribution to energy transition, the project would generate direct and indirect benefits to the local community, including:
 - up to 300 construction workers would be required during the 6 to 9 month peak construction period;
 - expenditure on accommodation and businesses in the local economy by workers involved in the project;
 - the procurement of goods and services by BCSF and associated contractors; and
 - implementing a community benefit sharing scheme providing benefits to 36 non-associated receivers equivalent to \$1,797 per MW (\$629,140), a one-off payment of \$150,000 to the Buckingham Estate Community Association and funding an annual open day for Indigenous cultural and heritage learning on the site (\$3,333 per year for 30 years).
- Further, BCSF and Queanbeyan-Palerang Regional Council have entered into a VPA to provide \$1.24 million over 20 years.
- Noting the above, the Department considers that the project would have a positive socio-economic impact on the local community.

- BCSF to implement its community benefit sharing scheme.

Cumulative Impacts

- Although the southern end of Capital 2 Wind Farm is located adjacent to the site, the wind farm site access point is located approximately 15 km north of the site. As such, the Department considers potential cumulative traffic impacts are unlikely, even in the event of construction occurring simultaneously.
- Up to 300 workers would be required during the construction period and BCSF has committed to source workers from the local community, including the town of Bungendore and surrounding areas where possible.
- There is potential for construction of the project to overlap with the construction of the Capital 2 Wind Farm and Springdale Solar Farm however, accommodation would be sourced from the local and wider region, including neighbouring towns (e.g. Bungendore, Tarago, Gundaroo and Queanbeyan) and LGAs, which would be able to accommodate the workforce should the construction periods overlap.
- While there is sufficient workers accommodation for this project, in order to manage the potential cumulative impacts of increased rents, particularly within the Queanbeyan-Palerang LGA and to encourage locally sourced workers,

- Prepare an Accommodation and Employment Strategy for the project in consultation with Queanbeyan-Palerang Regional Council, with consideration to prioritising the employment of local workers.

Findings

Recommendations

the Department requires BCSF to develop an Accommodation and Employment Strategy in consultation with Queanbeyan-Palerang Regional Council.

Decommissioning and rehabilitation

- The Department has developed standard conditions for solar farms and BESS' to cover this stage of the project life cycle, including clear decommissioning triggers and rehabilitation objectives such as removing all above and below ground infrastructure and restoring land capability to its pre-existing agricultural use.
- With the implementation of the standard conditions, the Department considers that the solar farm and BESS 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.
- Include rehabilitation objectives requiring the site to be rehabilitated within 18 months of cessation of operations.

6 Evaluation

The Department has assessed the development application, EIS, submissions, Submissions Report, Amendment Report and additional information provided by BCSF and advice received from relevant government agencies. The Department has also considered the objectives and relevant considerations under Section 4.15 of the EP&A Act.

The site is located on land predominantly zoned RU1 where electricity generating works are permissible with consent under the Transport and Infrastructure SEPP. Electricity generating works are also permissible on the portion of the land zoned C3 under Section 4.38(3) of the EP&A Act.

The solar farm development is a suitable land use for the site as it has good solar resources, direct access to the local road network and there is available capacity on the existing electricity network located in an area.

The project has been designed to largely avoid key constraints, including noise and amenity impacts to nearby non-associated residences, Aboriginal cultural heritage sites, watercourses, areas of higher biodiversity value and flood prone land. 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. Importantly, the site could be returned to agricultural uses after the project is decommissioned and the inherent agricultural capability of the land would not be affected in the long term.

The Department considers that there would be no significant visual impacts on surrounding residences, due to distance or intervening topography reducing the potential for significant impacts and existing and proposed vegetation providing screening from non-associated residences and the public road network.

The Department considered the submissions made through the exhibition of the project and the issues raised by the community and agencies during consultation. These matters have been addressed through changes to the project and the recommended conditions of consent.

Importantly, 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 NSW's *Climate Change Policy Framework, the Net Zero Plan Stage 1: 2020 – 2030*. It would have a generating capacity of 350 MW of clean electricity, which is enough to power approximately 133,500 homes, and 300 MW of energy storage to dispatch energy to the grid when the energy generation from renewable resources is limited.

On balance, the Department considers that the site is suitable for a solar farm and 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, a planning agreement with Queanbeyan-Palerang Regional Council and a community benefit sharing scheme, the project would also stimulate economic investment in renewable energy and provide flow-on benefits to the local community.

On balance, the project is in the public interest, subject to the recommended conditions of consent.

7 Recommendation

It is recommended that the Director, as delegate of the Minister for Planning:

- **considers** the findings and recommendations of this report;
- **accepts** and **adopts** all of the findings and recommendations in this report as the reasons for making the decision to grant consent to the application;
- **agrees** with the key reasons for approval listed in the notice of decision (see **Appendix H**);
- **grants** consent to the application in respect of Blind Creek Solar Farm (SSD 13166280); and
- **signs** the attached development consent and recommended conditions of consent (see **Appendix G**).

Prepared by:

Kurtis Wathen, Senior Environmental Assessment Officer

Recommended by:



Andy Nixey
Team Leader
Energy Assessments

8 Determination

The recommendation is **Adopted** / ~~Not adopted~~ by:



28/7/23

Nicole Brewer
Director
Energy Assessments

Appendices

Appendix A – List of Documents

Blind Creek Solar Farm – Environmental Impact Statement, NGH Pty Ltd (May 2022)

Blind Creek Solar Farm – Submissions Report. NGH Pty Ltd (November 2022)

Blind Creek Solar Farm – Amendment Report (October 2022)

Blind Creek Solar Farm – Response to Request for Further Information (March 2023)

Blind Creek Solar Farm – Response to Request for Further Information (July 2023)

Appendix B – Environmental Impact Statement

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

Appendix C – Submissions

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

Appendix D – Submissions Report

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

Appendix E – Amendment Report

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

Appendix F – Additional Information

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

Appendix G – Recommended Conditions of Consent

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

Appendix H – Notice of Decision

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

Appendix I – Statutory Considerations

In line with the requirements of Section 4.15 of the EP&A Act, the Department's assessment of the project has given detailed consideration to a number of statutory requirements. These include:

- the objects found in Section 1.3 of the EP&A Act; and
- the matters listed under Section 4.15(1) of the EP&A Act, including applicable environmental planning instruments and regulations.

The Department has considered all these matters in its assessment of the project and has provided a summary of this assessment below.

Aspect	Summary
Objects of the EP&A Act	<p>The objects of most relevance to the Minister’s decision on whether or not to approve the project are found in Section 1.3(a), (b), (c), (e) and (f) of the EP&A Act.</p> <p>The Department considers 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 the project:</p> <ul style="list-style-type: none"> • is a permissible land use on the subject land; • is located in a logical location for efficient solar energy development; • is able to be managed such that the impacts of the project could be adequately minimised, managed, or at least compensated for, to an acceptable standard; • would contribute to a more diverse local industry, thereby supporting the local economy and community; • would not fragment or alienate resource lands in the LGA; and • is consistent with the goals of NSW’s <i>Climate Change Policy Framework and Net Zero Plan Stage 1: 2020 - 2030</i> and would assist in meeting Australia’s renewable energy targets whilst reducing greenhouse gas emissions. <p>The Department has considered the encouragement of ESD (Object 1.3(b)) in its assessment of the project. This assessment integrates all significant socioeconomic and environmental considerations and seeks to avoid any potential serious or irreversible environmental damage, based on an assessment of risk-weighted consequences.</p> <p>In addition, the Department considers that appropriately designed SSD solar development, in itself, is consistent with many of the principles of ESD. BCSF has also considered the project against the principles of ESD. Following its consideration, the Department considers that the project can be carried out in a manner that is consistent with the principles of ESD.</p> <p>Consideration of environmental protection (Object 1.3(e)) is provided in section 5.4 of this report. Following its consideration, the Department considers that the project is able to 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 can be managed and/or mitigated by imposing appropriate conditions and retiring the required biodiversity offset credits.</p> <p>Consideration of the sustainable management of built and cultural heritage (Object 1.3(f)) is provided in section 5.4 of this report. Following its consideration, the Department considers the project would not significantly impact the built or cultural heritage of the locality.</p>
State significant development	<p>Under Section 4.36 of the EP&A Act the project is considered a State significant development.</p> <p>The Minister for Planning is the consent authority for the development. Under the Minister’s delegation of 9 March 2022, the Director, Energy Assessments, may determine the project.</p>
Environmental Planning Instruments	<p>The <i>Palerang Local Environmental Plan 2014</i> (LEP) applies and is discussed in sections 3.3 and 5.2 of this report, particularly regarding permissibility and land use zoning. As discussed in section 5.2, while the project would be prohibited under the LEP, it is permissible under the Transport and Infrastructure SEPP. In accordance with the Transport and Infrastructure SEPP, the Department has given written notice of the project to Transgrid as the electricity supply authorities and TfNSW.</p>

Aspect**Summary**

BCSF completed a preliminary risk screening and preliminary hazard analysis in accordance with *State Environmental Planning Policy (Resilience and Hazards) 2021* (Hazards SEPP). The site is not listed as a contaminated site in the NSW EPA Contaminated Land Record or the list of NSW contaminated sites. Given the site has historically been used for agricultural uses, the Department considers the site would be suitable for the proposed development.

The Department has considered the provisions of *State Environmental Planning Policy (Primary Production) 2021*. Of relevance to the project, the SEPP aims to facilitate the orderly 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. While the location of State significant agricultural land has not been finalised, the Department has considered all of these matters in **section 5.2** of this report.

Queanbeyan-Palerang Regional Council is listed under *State Environmental Planning Policy (Biodiversity and Conservation) 2021*. BCSF's biodiversity assessment found no evidence of Koala, and the Department has considered biodiversity in **section 5.4** of this report.