

EPBC Act referral



Australian Government
Department of Agriculture, Water and the Environment

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Title of proposal	2021/9102 - Goulburn River Solar Farm
Section 1	
Summary of your proposed action	
1.1 Project industry type	Energy Generation and Supply (renewable)
1.2 Provide a detailed description of the proposed action, including all proposed activities	<p>This Referral is for the construction, operation, civil works, maintenance and decommissioning of a large-scale solar farm and a Battery Energy Storage System (BESS) by Lightsource Development Services Australia Pty Ltd (Lightsource bp) (the Proponent), located in the Upper Hunter Local Government Area (LGA) of New South Wales (NSW) approximately 28 kilometres (km) southwest of Merriwa (refer to Attachment A) (the Project Area). The proposed Goulburn River Solar Farm includes up to 588 megawatt-peak (MWp) of solar electricity generation and a BESS with a capacity of 588 megawatt-hours (MWh) (the Proposed Action).</p> <p>The Proposed Action will potentially impact on the critically endangered ecological community, White Box- Yellow Box- Blakely's Red Gum Grassy Woodland and Derived Native Grassland through construction activities, primarily through vegetation clearing. Threatened species, including the Regent honeyeater, Painted honeyeater, Corben's long-eared bat, Pink-tailed worm-lizard, blugrass and homoranthus darwinioides may be impacted by vegetation clearing, noise, and general construction. Once operational, no ongoing significant impacts to threatened ecological communities or species is anticipated.</p> <p>The Proposed Action comprises the following components:</p> <ul style="list-style-type: none">- Installation of approximately 950,000 bifacial solar PV modules in an east-west single-axis tracking arrangement with an approximate height of 5 metres (m) above ground level.- Construction of a battery energy storage system (BESS) with a 296 MWp and 588 MWh capacity. The BESS will be housed in a series of outdoor containers, either distributed across the site or aggregated in one central location.- Construction of an onsite 500 kV switchyard and substation, with underground electrical conduits and cabling leading into the yard and overhead lines reaching above to the existing transmission line. An additional tower may be erected on the current line to accommodate the grid connection.- Installation of onsite power line connection via underground electrical conduits and cabling.- Construction of a communications tower, up to 75m high, providing communications, radio and cellular services to the site and wider region.- Upgrades and construction of internal access allowing for site maintenance.- Construction of site office and operations and maintenance building with parking for the operations team.- Primary solar farm site access point from existing driveway off of Wollara Road, with additional access points proposed along the north-western boundary of the Project Area.- Provision of drainage line crossings if and where required to manage existing surface water flows (to be determined during further design development) and access points for construction purposes.- Perimeter security fencing, crossing gates, water tanks or dams, and potential alternate secondary access points to facilitate sheep grazing- Vegetation clearing where required. <p>The Proposed Action is surrounded by the Goulburn River National Park and has a 500 kilovolt (kV) transmission line that runs through the south-eastern corner of the Project Area. The Proposed Action will directly connect to the grid via this transmission line. Additional cabling may need to be installed within the existing transmission towers and existing easement. This remains under investigation with TransGrid.</p> <p>The solar farm and BESS will be located on a single freehold property across multiple lots, covering a maximum area of approximately 1,249 hectares (ha) (Attachment B). The total area of the property is approximately 2,000ha. For the purposes of this referral, it is assumed that the Proposed Action would have a development footprint of 1,249 ha. This may be subject to revision following further ecological and heritage investigations, and continued community and stakeholder consultation.</p> <p>The Proposed Action is located within the Upper Hunter LGA and is zoned as RU1 Primary Production under the Upper Hunter Local Environmental Plan 2013 (Upper Hunter LEP). Electricity generating works are not permitted with consent in this zone, however, under the State Environmental Planning Policy 2007 (Infrastructure) (ISEPP), solar energy generation is permitted on any land. As such, the proposal is permitted under NSW planning policy. Land within the Project Area has been subject to extensive vegetation clearing associated with historic agricultural land uses and is predominately utilised for grazing activities.</p> <p>The Proposed Action is intended to be a State Significant Development (SSD) for the purposes of the NSW Environmental Planning & Assessment Act 1979. The proponent intends for the Proposed Action to be assessed under the bilateral agreement between the Commonwealth and NSW State governments.</p>
1.3 What is the extent and location of your proposed action?	See Appendix B
1.5 Provide a brief physical description of the property on which the proposed action will take place and the location of the proposed action (e.g. proximity to major towns, or for off-shore actions, shortest distance to mainland)	



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The Project Area is on a rural property approximately 28km south-west of Merriwa, NSW, within the Upper Hunter LGA (Attachment A). The Project Area is accessible from the Golden Highway via Wollara Road, which extends along the western boundary of the site (Attachment C). The Project Area is surrounded by the Goulburn River National Park.

The Project Area supports a mosaic of exotic vegetation where cropping and pasture improvement has occurred, derived native grasslands in a range of conditions subject to various degrees of disturbance over time, isolated paddock trees, areas of thinned woodland and forest, and areas of intact woodland and forest around the periphery of the Project Area. Two existing homesteads occur on the property, with associated access tracks and fencing.

The Goulburn River is approximately 3km from the Project Area, near its west and southern boundaries. A number of creeks and drainage lines within the Project Area flow into the Goulburn River.

1.6 What is the size of the proposed action area development footprint (or work area) including disturbance footprint and avoidance footprint (if relevant)?

The Project Area covers approximately 2,000ha. The current concept design indicates that the Proposed Action will have a total development footprint of approximately 1,249ha within the Project Area, but this development footprint may change during the detailed design stages of the Proposed Action. At this stage, it is assumed that the disturbance footprint will be approximately 1,249 ha, avoiding the remaining 751ha of the Project Area.

1.7 Proposed action location

Address - 2335 Wollara Rd, Merriwa, NSW, 2329, Australia

1.8 Primary jurisdiction New South Wales

1.9 Has the person proposing to take the action received any Australian Government grant funding to undertake this project?

Yes No

1.10 Is the proposed action subject to local government planning approval?

Yes No

1.11 Provide an estimated start and estimated end date for the proposed action

Start Date	01/06/2023
End Date	31/12/2065

1.12 Provide details of the context, planning framework and state and/or local Government requirements

NSW Planning Approval Pathway

There are a number of legislative instruments in NSW which regulate the planning and environmental impact of development. The primary instrument is the Environmental Planning and Assessment Act 1979 (EP&A Act) which regulates the environmental assessment and approval process for development in the State. The EP&A Act is supported by the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation).

NSW Environmental Planning and Assessment Act 1979

The Proposed Action will require development consent under Part 4 of the EP&A Act. The Proposed Action is State Significant Development (SSD) under the provisions of the State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP) and is subject to the provisions of Division 4.7 of the EP&A Act. As such, the Proposed Action will require the preparation of an Environmental Impact Statement (EIS). The development application for the Proposed Action will be lodged with the Planning Secretary of the NSW Department of Planning, Industry and Environment (DPIE). A request for the Secretary's Environmental Assessment Requirements (SEARs) for the EIS will be submitted in November 2021. SEARs are expected to be issued in January 2022.

Under Division 4.2, Section 4.5 of the EP&A Act the consent authority for SSD is the Independent Planning Commission (if the development is of a kind for which the Commission is declared the consent authority by an environmental planning



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instrument) or the Minister (if the development is not of that kind).

Section 4.15 of the EP&A Act describes the matters for consideration in assessing SSD, which includes the provisions of relevant environmental planning instruments, proposed instruments that have been the subject of public consultation, development control plans, planning agreements and statutory regulations.

The assessment of SSD must also consider the likely impacts of the development, suitability of the site, any submissions received and the public interest.

Clause 4.41 of the EP&A Act clarifies that development consent for SSD includes authorisations under the following statutory provisions, meaning that separate planning approval processes do not apply:

- A permit under Section 201, 205 or 219 of the Fisheries Management Act 1994 (FM Act)
- An approval under Part 4, or an excavation permit under Section 139, of the Heritage Act 1977 (Heritage Act)
- An Aboriginal heritage impact permit under Section 90 of the National Parks and Wildlife Act 1974 (NPW Act)
- A bushfire safety authority under Section 100B of the Rural Fires Act 1997
- A water use approval under Section 89, a water management work approval under Section 90 or an activity approval (other than an aquifer interference approval) under Section 91 of the Water Management Act 2000.

State Environmental Planning Policy (State and Regional Development) 2011

The SRD SEPP declares certain developments to be SSD. Under the SRD SEPP, the Proposed Action is SSD as it is a development for the purpose of electricity generation and will have a capital investment value of more than \$30 million.

Permissibility

Clause 34 (7) of the State Environmental Planning Policy (Infrastructure) 2007 (ISEPP) states that development for the purpose of a solar energy system may be carried out by any person with consent on any land. The approval authority would be the NSW Minister for Planning. A solar energy system includes a PV electricity generating system. The Proposed Action, being located on land zoned as RU1 Primary Production, is therefore permissible with consent.

1.13 Describe any public consultation that has been, is being or will be undertaken, including with Indigenous stakeholders

A Social Impact Assessment (SIA) will be prepared to support the EIS. As part of the Scoping Report for the request for SEARs, a community and stakeholder engagement strategy has been prepared to identify stakeholder views on the Proposed Action. Stakeholder engagement has commenced and is being approached through two rounds: the scoping phase and EIS preparation. The first round of engagement activities occurred in September - November 2021 to introduce the Proposed Action and gather feedback from key stakeholders and the community.

The round 1 engagement program included initial briefings with relevant government agencies. These briefings included an overview of the Proposed Action, a discussion of the assessment and approvals process, and sought feedback on issues considered relevant to the referral and EIS. The following government agencies have been briefed on the Proposed Action:

- DPIE, Energy Assessments – pre scoping meeting 21 September 2021
- NSW National Parks and Wildlife Services (NPWS) - 15 September 2021
- Commonwealth Department of Agriculture, Water and the Environment (DAWE) – pre-referral meeting 10 September 2021
- Upper Hunter Shire Council – 21 October 2021 and 9 November 2021.

Information sheets were also distributed to the community and two online information sessions were held on Thursday 28th October and Saturday 30th October 2021. A Social Baseline Scoping Report has subsequently been prepared outlining the findings of this initial consultation. This report is still being finalised and will be submitted to DPIE as part of the application for Secretary's Environmental Assessment Requirements (SEARs).

In-person and online meetings have also been carried out with key community groups, as outlined in the Social Baseline Scoping Report.

During the preparation of the EIS, the agencies listed above will continue to be consulted on the EIS findings. Additional government agencies that will be consulted throughout the Proposed Action include:

- Heritage NSW
- Rural Fire Service (RFS)
- Fire and Rescue NSW
- NSW Environment Protection Authority (EPA)
- Local Land Services (LLS)
- Water NSW / National Resources Access Regulator (NRAR)
- DPIE Water

Further community consultation will also be undertaken, with in-person community sessions proposed to be held in March/April 2022.

Consultation with Aboriginal parties commenced in October 2021, having regard to the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW, 2010). Representative Aboriginal Parties (RAPs) are still being identified, with consultation to be ongoing throughout the Proposed Action, to inform an Aboriginal Cultural Heritage Assessment (ACHA).



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1.14 Describe any environmental impact assessments that have been or will be carried out under Commonwealth, State or Territory legislation including relevant impacts of the project

No formal environmental impact assessment has been prepared, submitted, or approved under Commonwealth or State legislation.

An EIS will need to be prepared for the Proposed Action to be assessed under the NSW EP&A Act. A request for SEARs for the EIS was submitted in December 2021. The following preliminary environmental assessments have been undertaken:

- Preliminary ecological investigations, comprising searches and preliminary vegetation mapping. Some targeted surveys for threatened species have also been undertaken.
- Preliminary desktop heritage investigations.
- Preliminary access route assessment.
- Community and Stakeholder Engagement Strategy.
- SIA Baseline Scoping Report, which documents the process and outcomes of the Round 1 engagement activities undertaken.

This information will be provided as part of a Bilateral EIS if the Department considers the Proposed Action to be a controlled action.

1.15 Is this action part of a staged development (or a component of a larger project)?

Yes No

1.16 Is the proposed action related to other actions or proposals in the region?

Yes No



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Section 2
Matters of national environmental significance
2.1 Is the proposed action likely to have any direct or indirect impact on the values of any World Heritage properties? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2.2 Is the proposed action likely to have any direct or indirect impact on the values of any National Heritage places? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2.3 Is the proposed action likely to have any direct or indirect impact on the ecological character of a Ramsar wetland? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Wetland <p>The Project Area is located 150 - 200km upstream from the Hunter Estuary Wetlands.</p>
Impact <p>The Proposed Action is considered unlikely to have any significant impact to the Hunter Estuary Wetlands due to its substantial distance upstream. The Proposed Action is approximately 3km east of the Goulburn River, with a number of drainage lines within the Project Area flowing into the river. During construction, impacts to these drainage lines would be managed through a Construction Environmental Management Plan (CEMP), including a sedimentation and erosion control plan. Water quality and quantity would be monitored through the CEMP to ensure no impacts on surrounding waterways occurs as a result of construction activities. Once operational, impacts to surrounding waterways and drainage lines would be managed through an Operational Environmental Management Plan (OEMP). The Project Area is also surrounded by dense vegetation, making up the Goulburn River National Park. It is considered unlikely that any increase in surface water flows from the Project Area into the surrounding vegetated area would impact the Hunter Estuary Wetlands.</p>
2.3.2 Do you consider this impact to be significant? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2.4 Is the proposed action likely to have any direct or indirect impact on the members of any listed species or any threatened ecological community, or their habitat? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Species or threatened ecological community <p>White Box – Yellow Box – Blakely’s Red Gum Grassy Woodland and Derived Native Grassland – critically endangered</p>
Impact <p>Potential to be significantly impacted by vegetation clearing and construction activities – there is the potential for approximately 853.7 ha of Box Gum Woodland and Derived Native Grassland to occur in the Project Area. The Proposed Action has the potential to impact a maximum area of 527 ha of this threatened ecological community (TEC).</p> <p>The indicative development footprint supports 527 hectares of land supporting vegetation with potential to conform to the White Box – Yellow Box – Blakely’s Red Gum Grassy Woodland and Derived Native Grassland critically endangered ecological community. The 527 ha identified comprises:</p> <ul style="list-style-type: none"> • 56 ha of woodland likely to both conform to diagnostic criteria and meet condition thresholds for the CEEC • 375 ha of derived native grassland meeting diagnostic criteria, and with a moderate potential to meet condition thresholds for the CEEC (subject to additional plot-based assessment of floristic diversity) • 96 ha of vegetation identified as having some potential to conform to the CEEC which will be considered in detailed plot-based assessment of floristic diversity, however, has been assigned a low – moderate likelihood of meeting either diagnostic criteria, due to the dominance of non-typical tree species or the absence of a diverse forb component in a native groundcover. <p>The Proposed Action will not involve complete clearing of the ground stratum over much of the Project Area and as such potential impacts would largely be associated with the perceived changes relating to shading and other microhabitat changes when the grasslands are overshadowed by the proposed solar array. It is unclear if the overshadowing of derived native</p>



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grasslands would change the composition of the grasslands such that it no longer meets the condition criteria listed in the Approved Conservation Advice.

The Proponent proposes to present further assessment of potential impacts within an EIS for the Proposed Action.

Species or threatened ecological community

Regent honeyeater (*Anthochaera phrygia*) – critically endangered

Impact

Potential to be significantly impacted by vegetation clearing and construction activities - while all records are prior to 2000, the Goulburn River valley to the west is a known breeding area and important habitat is mapped in the Project Area (Attachment D).

The Project Area contains 894.41 ha of important Regent honeyeater habitat. The preliminary design has sought to avoid impacts on mapped important Regent honeyeater habitat. A total of 108.9 ha of mapped important habitat for Regent honeyeater is present in the indicative development footprint. The Proposed Action will avoid approximately 785.51 ha of Regent honeyeater habitat.

The Proponent proposes to present further assessment of potential impacts within an EIS for the Proposed Action.

Species or threatened ecological community

Glossy black-cockatoo (*Calytorhynchus lathami*) – vulnerable

Impact

Unlikely to be significantly impacted by the Proposed Action (notably, construction and operational activities) - while there is some foraging habitat present on-site, breeding activity was not detected in the targeted surveys. The results of these surveys will be detailed in a Biodiversity Development Assessment Report (BDAR). The Proponent proposes to present further assessment of potential impacts within an EIS for the Proposed Action.

Species or threatened ecological community

Painted honeyeater (*Grantiella picta*) - vulnerable

Impact

Potential to be significantly impacted by vegetation clearing and construction activities – suitable habitat is present in the Project Area, with the species occurring in eucalyptus woodland and forests, with a preference for mistletoe (*Amyema* spp.). The Proponent proposes to present further assessment of potential impacts within an EIS for the Proposed Action.

Species or threatened ecological community

White-throated needletail (*Hirundapus caudacutus*) - vulnerable

Impact

Unlikely to be significantly impacted by the Proposed Action during either construction or operation – the species has a high likelihood of occurring in the airspace above the Project Area, demonstrating a preference to forage over treed habitats. However, the species breeds in Asia, and therefore the Proposed Action is not expected to impact any roosting or breeding habitat. The Proponent proposes to present further assessment of potential impacts within an EIS for the Proposed Action.

Species or threatened ecological community

Swift parrot (*Lathamus discolor*) – critically endangered

Impact

Unlikely to be significantly impacted by the Proposed Action during either construction or operation – suitable foraging habitat is present within the Project Area. There are records within 30km of the Project Area, but none within 10km. The species mostly occurs on the coast and southwest slopes, however, cannot be discounted at this stage from the Project Area.

The preliminary design for the indicative development footprint seeks to avoid impacts to the majority of timbered areas within the Project Area, with impacts largely restricted to areas previously impacted by intensive agriculture. Any impacts to potential foraging habitat would be minor in the context of foraging habitat present elsewhere in the Project Area and the surrounding areas of Goulburn River National Park. The Proponent proposes to present further assessment of potential impacts within an EIS for the Proposed Action.



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Species or threatened ecological community

Large-eared pied bat (*Chalinolobus dwyeri*) – vulnerable

Impact

Unlikely to be significantly impacted by the Proposed Action during either construction or operation – roosting and breeding habitat is likely to be present in adjacent areas of Goulburn River National Park and may be present in the Project Area outside the indicative development footprint.

Not expecting to impact any roosting and breeding habitat directly as part of the Proposed Action. The Proponent proposes to present further assessment of potential impacts within an EIS for the Proposed Action.

Species or threatened ecological community

Spotted-tailed quoll (*Dasyurus maculatus maculatus*) - endangered

Impact

Unlikely to be significantly impacted by the Proposed Action during either construction or operation – there is suitable habitat present in the Project Area, with the species potentially utilising a range of habitat types. Individual animals may use hollow-bearing trees, fallen logs, rock crevices and boulder fields as den sites.

The preliminary design for the indicative development footprint seeks to avoid impacts to the majority of timbered areas within the Project Area, with impacts largely restricted to areas previously impacted by intensive agriculture. Potential habitat in the indicative development footprint has been highly degraded by past clearing and agricultural land use and, aside from remnant hollow-bearing trees lacks habitat features likely to be important for shelter and foraging for spotted-tailed quoll. The lack of important habitat features or a mid-storey or shrubby understorey from the indicative development footprint means that the species is unlikely to regularly forage, shelter or move through the indicative development footprint, and would favour other parts of the landscape. Any impacts to potential foraging habitat or hollow-bearing trees within the agricultural landscape would be minor and unlikely to result in any significant impacts to the species. The Proponent proposes to present further assessment of potential impacts within an EIS for the Proposed Action.

Species or threatened ecological community

Corben's long-eared bat (*Nyctophilus corbeni*) - vulnerable

Impact

Potential to be significantly impacted through vegetation clearing and general construction activities (noise) – there is suitable foraging and breeding habitat present in the Project Area, with previous records existing to the west and south in the Goulburn River National Park. The Proponent proposes to present further assessment of potential impacts within an EIS for the Proposed Action.

Species or threatened ecological community

Koala (*Phascolarctos cinereus*) – vulnerable

Impact

Unlikely to be significantly impacted by the Proposed action – the Project Area contains a historical record from 1956, surveys conducted showed that the Project Area does not appear to be within core habitat of the Koala population known to occur on the Goulburn River to the south-west. The Proponent proposes to present further assessment of potential impacts within an EIS for the Proposed Action.

Species or threatened ecological community

Pink-tailed worm-lizard (*Aprasia parapulchella*) - vulnerable

Impact

Potential to be significantly impacted through habitat clearing and installation of solar panel arrays - Typically occurs in rocky areas within Natural Temperate Grassland, but also occurs in rocky areas within open grassy woodland and grassland derived from cleared woodland. Sites where the species occurs tend to be well drained and contain numerous scattered surface rocks which are weathered and partially embedded in the soil and grass.

There is potentially suitable habitat in the Project Area. Further investigation is required. The Proponent proposes to present further assessment of potential impacts within an EIS for the Proposed Action.



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Species or threatened ecological community

Bluegrass (*Dichanthium setosum*) - vulnerable

Impact

Potential to be significantly impacted by vegetation clearing, construction of access tracks and installation of solar panel arrays - Potentially suitable habitat is present in the Project Area, though the site occurs towards the southern limit of this species distribution. The Proponent proposes to present further assessment of potential impacts within an EIS for the Proposed Action.

Species or threatened ecological community

Homoranthus darwinioides - vulnerable

Impact

Potential to be significantly impacted by vegetation clearing, construction of access tracks and installation of solar panel arrays – species occurs in thin sandy soil on sandstone outcrops and sloping ridges in Goulburn River National Park. Potentially suitable habitat is present in the Project Area, and known populations are present along Wollar Road in Goulburn River National Park.
Potential impacts arising from access roads would need to be considered. However, the indicative development footprint is primarily located on the basalt cap within the site, avoiding areas with sandy soils that have suitable characteristics for this species. Further investigation of potential impact areas supporting native vegetation on sandy soils is warranted, however suitable areas supporting a shrub layer are few or absent from the indicative development footprint.
The Proponent proposes to present further assessment of potential impacts within an EIS for the Proposed Action.

Species or threatened ecological community

Prasophyllum sp. Wybong – critically endangered

Impact

Unlikely to be significantly impacted by the Proposed Action during either construction or operation – there is a low-moderate likelihood of the species occurring in the Project Area. Surveys completed in associated vegetation types in October 2021 did not detect this species. The Proponent proposes to present the results of this survey effort within an EIS and BDAR for the Proposed Action.

2.4.2 Do you consider this impact to be significant?

Yes No

2.5 Is the proposed action likely to have any direct or indirect impact on the members of any listed migratory species or their habitat?

Yes No

Migratory species

White Throated Needletail – (*Hirundapus caudacutus*)

Impact

Unlikely to be significantly impacted by the Proposed Action due to the aerial nature of the species it is likely to use the airspace above the site. Due to the terrestrial nature of the Proposed Action, it is unlikely to be impacted. Further assessment would be provided in the EIS.

Migratory species

Pacific swift (*Apus pacificus*)

Impact

Unlikely to be significantly impacted by the Proposed Action. While the species is likely to occasionally forage in airspace above the Project Area, the species is known to use a wide variety of habitat types. Due to the terrestrial nature of the Proposed Action, it is unlikely to be impacted. Further assessment would be provided in the EIS.



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Migratory species

Satin Flycatcher (*Myiagra cyanoleuca*)

Impact

Unlikely to be significantly impacted by the Proposed Action. These species typically favour dense vegetation and uncleared areas. The development footprint is expected to avoid preferred habitats for the species. The Project Area is restricted to cleared or thinned areas, and there are extensive areas of preferred habitat present in surrounding areas of Goulburn River National Park. Further assessment would be provided in the EIS.

Migratory species

Latham's snipe (*Gallinago hardwickii*)

Impact

Unlikely to be significantly impacted by the Proposed Action. Potential habitat is present in the Project Area in the lower lying paddock areas around dams. However, the Project Area does not contain any important habitat or wetland areas, being its preferred habitat. Further assessment would be provided in the EIS.

Migratory species

Rufous fantail (*Rhipidura rufifrons*)

Impact

Unlikely to be significantly impacted by the Proposed Action. No suitable habitat is present in the indicative development footprint. May rarely occur in the Project Area during migration. Suitable habitat will be avoided by the Proposed Action. Further assessment would be provided in the EIS.

2.5.2 Do you consider this impact to be significant?

Yes No

2.6 Is the proposed action to be undertaken in a marine environment (outside Commonwealth marine areas)?

Yes No

2.7 Is the proposed action likely to be taken on or near Commonwealth land?

Yes No

2.8 Is the proposed action taking place in the Great Barrier Reef Marine Park?

Yes No

2.9 Is the proposed action likely to have any direct or indirect impact on a water resource from coal seam gas or large coal mining development?

Yes No

2.10 Is the proposed action a nuclear action?

Yes No

2.11 Is the proposed action to be taken by a Commonwealth agency?

Yes No



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2.12 Is the proposed action to be undertaken in a Commonwealth Heritage place overseas?

Yes No

2.13 Is the proposed action likely to have any direct or indirect impact on any part of the environment in the Commonwealth marine area?

Yes No



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Section 3

Description of the project area

3.1 Describe the flora and fauna relevant to the project area

The Project Area consists of agricultural land, the majority of which has been subjected to land clearing, a long history of grazing, and cropping and pasture improvement. Historically, the whole of the landscape would have supported open woodlands and forests. As a result, the Project Area supports a mosaic of exotic vegetation, derived native grasslands in a range of conditions, isolated paddock trees, areas of thinned woodland and forest, and areas of intact woodland and forest around the periphery of the Project Area. These remaining vegetated areas in the Project Area act as a potential corridor for fauna species across the site, supporting local biodiversity.

Preliminary surveys have been conducted within the Project Area. It is noted that further surveys need to be conducted as part of the biodiversity assessment.

Flora

Preliminary Plant Community Type (PCT) Mapping for the Project Area is shown in Attachment F - Preliminary PCT Mapping.

Nine PCTs occur in the Project Area. These PCTs include:

- PCT 483 - Grey Box White Box grassy open woodland on basalt hills in the Merriwa region, upper Hunter Valley
- PCT 616 - Grey Myrtle – Rusty Fig dry rainforest in sandstone gorges of the upper hunter valley, mainly Sydney

Basin Bioregion

• PCT 1604 - Narrow-leaved Ironbark – Grey Box – Spotted Gum shrub – grass woodland of the central and lower

Hunter
• PCT 1607 - Blakely's Red Gum – Narrow-leaved Ironbark – Rough-barked Apple shrubby woodland of the upper

Hunter
• PCT 1655 - Grey Box - Slaty Box shrub - grass woodland on sandstone slopes on the upper Hunter and Sydney

Basin
• PCT 1656 - Narrow-leaved Iron bark-Black Pine-Narrow leaved Wattle shrub-grass open forest on sandstone slopes of the hunter and Sydney Basin

• PCT 1661 - Narrow-leaved Ironbark - Black Pine - Sifton Bush heathy open forest on sandstone ranges of the upper Hunter and Sydney Basin

• PCT 1672 - Red Ironbark - Grey Gum - Black Pine heathy woodland on sandstone ranges of the Sydney Basin

• PCT 1674 - Red Ironbark - Brown Bloodwood - Black Pine heathy open forest on sandstone ranges of the Sydney

Basin

The Project Area supports 1,725.9 ha of native vegetation and 337.5 ha of exotic vegetation and infrastructure. The indicative development footprint supports 922.1 ha of native vegetation and 327.3 ha of exotic vegetation and infrastructure (access tracks, fencing).

Fauna

Preliminary surveys have identified the following species/species habitat in the Project Area:

• Glossy black-cockatoo (*Calyptorhynchus lathami*), listed as vulnerable under both the EPBC Act and the BC Act; foraging habitat is present on site, however, breeding activity was not detected in targeted surveys completed during the breeding season in accordance with the Biodiversity Assessment Method (BAM).

• Regent Honeyeater (*Anthochaera phrygia*), listed as critically endangered under the EPBC Act and the BC Act; while all records are prior to 2000, the Goulburn River valley to the west is a known breeding area.

• Barking owl (*Ninox connivens*), listed as vulnerable under the BC Act but not listed under the EPBC Act was detected during targeted forest owl surveys completed during the breeding season, additional breeding habitat assessments are required in accordance with the BAM.

• Large-eared pied bat (*Chalinolobus dwyeri*), listed as vulnerable under both the EPBC Act and the BC Act; roosting and breeding habitat is likely to be present in adjacent areas of Goulburn River National Park and may be present in the Project Area outside the indicative development footprint.

The Biodiversity Assessment is currently being prepared and would be submitted with the EIS.

3.2 Describe the hydrology relevant to the project area (including water flows)

The Project Area is located within the Hunter catchment system. The Goulburn River begins at Ulan near Mudgee and flows east to join the Hunter River near Denman. The Goulburn River runs along the Goulburn River National Park for around 90 km, with parts of the river occurring to the west of the Project Area. The Bow River also runs through the Goulburn River National Park. The north-eastern side of the Project Area contains creeks and drainage lines that flow into the Bow River. There are several creeks including Rocky Creek (flowing into the Goulburn River) and Redlynch Creek (flowing into the Bow River) that run through the Project Area. There are several second order creeks and drainage lines which run from these water sources.

There are also numerous farm dams located across the Project Area which are linked to the to several of the drainage lines which flow throughout the property. These dams are currently used to support the agricultural land use of the Project Area.



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Groundwater vulnerability mapping of the Upper Hunter LEP indicates that the Project Area does not fall into any area of groundwater vulnerability.

The indicative development footprint for the Proposed Action has been designed to provide appropriate setbacks to these creeks to assist in minimising potential impacts on water flow, quality and aquatic ecology. The indicative development footprint is shown in Attachment B.

3.3 Describe the soil and vegetation characteristics relevant to the project area

The Project Area ranges in elevation from approximately 325m to 450m above sea level. The Project Area is located on an elevated parcel of land that separates it from the surrounding Goulburn River National Park. The Project Area is generally flat to undulating in terrain, with some drainage lines and creeks providing some minor undulation in the landscape. The terrain is generally high in the centre of the Project Area, with a gradual slope down to its north-eastern and western boundaries. The landscape drops away sharply into the surrounding national park, particularly at its south-eastern boundary. The surrounding national park consists of hills and ridgelines, and a number of ravines that lead down into creeks and rivers, notably the Goulburn River.

The soils within the Project Area are classified as kurosols and rudosols under the Australian Soil Classification Soil Type map of NSW. The majority of the land in the Project Area is mapped as land Class 2 under the NSW Land and Soil Capability Assessment Scheme. This type of land has the capability to support a wide range of land uses and land management actions. This land capability is often associated with fertile soils and short gradual slopes. This is consistent with the Project Area as it is located on an elevated basalt cap previously used for agriculture, including cropping and grazing.

The Project Area is located on an elevated tertiary basalt cap surrounded by Narrabeen Sandstones landscape. While the majority of the site is located on the basalt cap, and is distinct from the surrounding sandstone landscape, the outer edges of the Project Area support sandstone specialist species. This is largely restricted to the edges of the Project Area, and primarily located outside the indicative development footprint.

As previously described, the Project Area consists of a mosaic of exotic vegetation, derived native grasslands, isolated paddock trees, areas of thinned woodland and forest, and areas of intact woodland and forest around the periphery of the Project Area. The Project Area supports 1,725.9 ha of native vegetation and 337.5 ha of exotic vegetation and infrastructure. The indicative development footprint supports 922.1 ha of native vegetation and 327.3 ha of exotic vegetation and infrastructure.

Analysis of vegetation communities against the diagnostic criteria for Commonwealth EPBC Act listed threatened ecological communities has determined that one critically endangered ecological community, White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland is present in the Project Area and within the indicative development footprint. No other EPBC Act listed threatened ecological communities were recorded, and additional communities are unlikely to be present. While large areas of derived grassland require further analysis to determine whether they meet condition thresholds, substantial impacts on this critically endangered ecological community are anticipated.

Mapping of vegetation zones meeting diagnostic criteria and condition thresholds for the EPBC Act listed White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland critically endangered ecological community has not been finalised. Assessment against condition thresholds will be partly based on detailed vegetation integrity assessment. Preliminary mapping of areas with a high and moderate likelihood of conforming to this ecological community are shown in Attachment D.

3.4 Describe any outstanding natural features and/or any other important or unique values relevant to the project area

The Proposed Action is surrounded on all sides by the Goulburn River National Park. The national park contains high conservation values as it is unique in topography, geology which support a diverse number of plant communities and animal species (NPWS, 2003). In particular, the National Park supports extensive geological and geomorphological diversity in an east-west direction, and along with significant transition in rainfall, this creates a diverse botanical transition zone. Basalt caps within the reserve are known to support substantially different vegetation types than surrounding landscapes.

The Proposed Action would not be entering into the Goulburn River National Park. Some road works may be required along Wollara Road, however, this is expected to remain within the road reserve. During detailed design, consideration will be given to relevant guidelines, including Developments adjacent to National Parks and Wildlife Service Lands, Guidelines for consent and planning authorities (DPIE, 2020).

The Project Area is also associated with a key event in the Aboriginal and non-Aboriginal history of the local area. The property has been owned by a single family for nearly 140 years. This original parcel of land, and the remains of the original house, are located within the Project Area. Anecdotal evidence from the landowner indicated that the Project Area, specifically the original house, was associated with the story of Jimmy Governor, an Aboriginal man who committed a number of murders in the district and who's story formed the basis for the modern Australian film 'The Chant of Jimmy Blacksmith'. Remains of the original homestead, consisting of a handful of wooden posts, still exist within the Project Area, towards the property's north-eastern boundary.

Preliminary research indicates that the original house is the location of two murders on the property in 1900. This event, known as the 'Merriwa Murders' in newspapers at the time, is one of several in the wider Hunter region attributed to Aboriginal man Jimmy Governor and his brother during 1900. These events occurred at a pivotal time in Australia's history, with federation of the nation and the interactions of Aboriginal people and the European settlers at the forefront of colonial



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politics. The narrative of Jimmy Governor as one of the last of the 'outlaws' in the State remains a marker in living memory of the interactions between Aboriginal and non-Aboriginal people within regional NSW at the federation of the nation.

The connections of the Project Area to Jimmy Governor on the property may hold significant connections to the community in the area and will be investigated further to understand the extent of any social and cultural values of the site to the community, including the Aboriginal community and the landholders.

An Aboriginal Cultural Heritage Assessment (ACHA) will be undertaken as part of the EIS in accordance with the Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH, 2011) and the Code of Practice for Archaeological Investigations of Aboriginal Objects in New South Wales (DECCW, 2010). The ACHA will include consultation with Aboriginal parties in determining and assessing impacts and developing mitigation measures for the Project, having regard to the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW, 2010).

3.5 Describe the status of native vegetation relevant to the project area

The Project Area supports 1,725.9 ha of native vegetation and 337.5 ha of exotic vegetation and infrastructure. The indicative development footprint supports 922.1 ha of native vegetation and 327.3 ha of exotic vegetation and infrastructure. Early design has been informed by preliminary vegetation mapping to prioritise impacts within areas of exotic vegetation.

The Project Area supports nine PCTs. These PCTs include:

- PCT 483 - Grey Box White Box grassy open woodland on basalt hills in the Merriwa region, upper Hunter Valley
- PCT 616 - Grey Myrtle – Rusty Fig dry rainforest in sandstone gorges of the upper hunter valley, mainly Sydney Basin Bioregion
- PCT 1604 - Narrow-leaved Ironbark – Grey Box – Spotted Gum shrub – grass woodland of the central and lower Hunter
- PCT 1607 - Blakely's Red Gum – Narrow-leaved Ironbark – Rough-barked Apple shrubby woodland of the upper Hunter
- PCT 1655 - Grey Box - Slaty Box shrub - grass woodland on sandstone slopes on the upper Hunter and Sydney Basin
- PCT 1656 - Narrow-leaved Iron bark-Black Pine-Narrow leaved Wattle shrub-grass open forest on sandstone slopes of the hunter and Sydney Basin
- PCT 1661 - Narrow-leaved Ironbark - Black Pine - Sifton Bush heathy open forest on sandstone ranges of the upper Hunter and Sydney Basin
- PCT 1672 - Red Ironbark - Grey Gum - Black Pine heathy woodland on sandstone ranges of the Sydney Basin
- PCT 1674 - Red Ironbark - Brown Bloodwood - Black Pine heathy open forest on sandstone ranges of the Sydney Basin

The vegetation within the Project Area ranges from poor to high-quality condition. Generally, the Project Area is considered to be degraded due to its historical agricultural use. The grassland areas that will be developed as part of the Proposed Action generally exist in a degraded state and, although select areas of these degraded areas conform to TECs, the majority are of low ecological value and unlikely to provide habitat for any potentially occurring MNES. This will be further investigated and mapped as part of the BDAR to support the EIS.

3.6 Describe the gradient (or depth range if action is to be taken in a marine area) relevant to the project area

The Project Area ranges in elevation from approximately 325 m to 450 m above sea level. The Project Area is located on an elevated basalt cap that separates it from the surrounding Goulburn River National Park. The Project Area is generally flat to undulating in terrain, with some drainage lines and creeks providing some minor undulation in the landscape. The terrain is generally high in the centre of the Project Area, with a gradual slope down to its north-eastern and western boundaries. The landscape drops away sharply into the surrounding national park, particularly at its south-eastern boundary.

3.7 Describe the current condition of the environment relevant to the project area

As previously noted, the Project Area is considered to be generally degraded due to its historical agricultural use, however, also contains native vegetation. Typical of agricultural landscapes, the Project Area contains large areas of exotic pasture with evidence of common weed infestations and feral animals (e.g. rabbits, foxes and wild dogs). This would be further investigated as part of the BDAR to support the EIS. The Proposed Action would seek to manage all weed infestation and feral animals as part of an operational Environmental Management Plan (EMP).

There are a number of creeks and drainage lines throughout the Project Area that contain some evidence of erosion. These waterways would be avoided and managed under an operational EMP.

3.8 Describe any Commonwealth Heritage places or other places recognised as having heritage values relevant to the project

No listed historical heritage items were identified within 10 km of the Project Area, including items on the World, National and Commonwealth Heritage lists, in addition to item listed on the State Heritage Inventory and Upper Hunter LEP. The closest listed heritage item is located 25 km northeast of the Project Area: 'Cottage Museum' in Merriwa (SHR item #00259).

An assessment of potential impacts on historic heritage will be undertaken as part of the EIS. The assessment will be prepared with regard to the NSW Heritage Manual (NSW Heritage Office, 1996), relevant Heritage Council of NSW



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guidelines and with consideration of the principles contained in the Australia ICOMOS Charter for Places of Cultural Significance (Australia ICOMOS Incorporated, 2013).

3.9 Describe any Indigenous heritage values relevant to the project area

The Project Area falls within the Wanaruah Local Aboriginal Land Council (LALC) area and is within the bounds of the Native Title Claim (NC2011/006 – Gomeroi People). This Native Title Claim was entered on the Register of Native Title Claims on the 20 December 2011.

There is one known Aboriginal cultural heritage record on the NSW Aboriginal Heritage Information Management System (AHIMS). There are five other records of known Aboriginal heritage in the vicinity of, but located outside, the Project Area.

The Goulburn River National Park is an area known to be significant for Aboriginal people. Before European settlement, the Goulburn River was an important trading route between the Aboriginal people who resided on the coast and those who lived on the western plains (NPWS, 2021). The Goulburn River National Park was traditionally occupied by the Wiradjuri, Gomeroi and Wonnarua People. There are currently more than 300 known Aboriginal sites remaining within the National Park (NPWS, 2021).

As noted in Section 3.4, the Project Area is known to have a connection to an important historical event involving an Aboriginal man, Jimmy Governor, and the death of two members of the original landholder' family that may hold significant connections to the community in the area. This will be investigated further to understand the extent of any social and cultural values of the site to the community, including the Aboriginal community and the landholder.

An Aboriginal Cultural Heritage Assessment (ACHA) will be undertaken as part of the EIS in accordance with the Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH, 2011) and the Code of Practice for Archaeological Investigations of Aboriginal Objects in New South Wales (DECCW, 2010). The ACHA will include consultation with Aboriginal parties in determining and assessing impacts and developing mitigation measures for the Project, having regard to the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW, 2010).

3.10 Describe the tenure of the action area (e.g. freehold, leasehold) relevant to the project area

The Project Area encompasses two freehold properties, covering an area of approximately 2,000 ha and 44 parcels of land. Wollara Road and a small portion of the Project Area on its western boundary consist of Crown Land.

The freehold land in the Project Area is zoned as RU1 Primary Production under the Upper Hunter LEP.

3.11 Describe any existing or any proposed uses relevant to the project area

Land within the Project Area has been subject to extensive vegetation clearing associated with historic agricultural land uses and is currently used for grazing activities with some cropping. The Proposed Action would result in the Project Area being used for solar power generation. The Proponent intends for the landholders to continue livestock grazing on the solar farm site once the Proposed Action is operational. This would include accommodating approximately 1,000 sheep on the property. This continued activity would also assist in managing biomass within the Project Area.

The Proponent has successfully co-located ongoing agricultural activity with other projects in Australia. This would create an agrisolar land use with the co-existence of agriculture and solar power generation.



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 4

Measures to avoid or reduce impacts

4.1 Describe the measures you will undertake to avoid or reduce impact from your proposed action

Measures to avoid impacts

The various components of the Proposed Action (e.g solar panels, BESS, substation) have been strategically located within the Project Area to avoid impacts to ecological values, where possible. In particular, remnant woodland areas of White Box – Yellow Box – Blakely’s Red Gum Grassy Woodland and Derived Native Grasslands and important habitat to Regent honeyeater have been avoided, where possible. Avoidance of the remnant woodland within the Project Area will result in sound ecological outcomes for much of the threatened fauna that has the potential to occur within the Project Area. The grassland areas that will be developed as part of the Proposed Action generally exist in a degraded state. Although select areas of these degraded areas conform to TECs, the majority is of low ecological value and unlikely to provide habitat for any potentially occurring MNES.

The design of the Proposed Action is still being determined. The indicative development footprint provided in this referral represents the maximum development area likely to be proposed. Where possible, further refinement of the development footprint with additional avoidance measures will be included in the Proposed Action.

Measures to mitigate impacts

As part of the detailed impact assessment for the Proposed Action, management strategies will be developed within the EIS to minimise and mitigate impacts wherever possible.

The Proposed Action would seek to implement a number of management strategies through the development of a construction EMP and an operational EMP. These two management documents would include strategies and safeguards to minimise impacts associated with construction and ongoing use of the Project Area. This would include weed management, feral animal control, erosion and sedimentation control procedures, water quality management and traffic management.

Retention of habitat connectivity, through staging works to enable fauna movements towards areas around the Project Area, would also be incorporated into the Proposed Action. This is aimed at supporting the species occurring in the Project Area.

Measures to compensate for potential significant residual impacts

Where unavoidable impacts are expected, the Proponent will seek to acquire offsets under the NSW Biodiversity Offset Scheme. The Proponent has commenced consultation with NSW National Parks and Wildlife Services and is open to working with them to potentially transfer areas of high conservation value within the Project Area to the surrounding National Park. This will be further investigated throughout the EIS assessment process.

4.2 For matters protected by the EPBC Act that may be affected by the proposed action, describe the proposed environmental outcomes to be achieved

As discussed in Section 4.1. the Proponent has already been through a design process focussed on the avoidance of remnant vegetation. A range of avoidance, mitigation and offsetting measures will be proposed to minimise and compensate for the losses in biodiversity, these are described in the table below.

These measures will be detailed in future management plans and will include environmental outcomes that will be detailed with reference to the SMART (specific, measurable, achievable, relevant and time-bound) criteria as outlined in the Outcomes-based Conditions Policy 2016 and Outcomes-based Conditions Guidance 2015 (DoE 2015).

In addition, the Proponent intends to offset any significant residual impacts to threatened ecological communities and/or habitat for threatened species via the offsetting options available for EPBC Act MNES under the BC Act.



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 5

Conclusion on the likelihood of significant impacts

5.1 You indicated the below ticked items to be of significant impact and therefore you consider the action to be a controlled action

- World Heritage properties
- National Heritage places
- Wetlands of international importance (declared Ramsar wetlands)
- Listed threatened species or any threatened ecological community
- Listed migratory species
- Marine environment outside Commonwealth marine areas
- Protection of the environment from actions involving Commonwealth land
- Great Barrier Reef Marine Park
- A water resource, in relation to coal seam gas development and large coal mining development
- Protection of the environment from nuclear actions
- Protection of the environment from Commonwealth actions
- Commonwealth Heritage places overseas
- Commonwealth marine areas

5.2 If no significant matters are identified, provide the key reasons why you think the proposed action is not likely to have a significant impact on a matter protected under the EPBC Act and therefore not a controlled action

The indicative development footprint has the potential to directly impact up to 527 hectares of vegetation potentially conforming to the White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland critically endangered ecological community. The Proposed Action will not involve complete clearing of the ground stratum over much of the Project Area and as such potential impacts would largely be associated with the perceived changes relating to shading, changes in surface water flow and other microhabitat changes when the grasslands are overshadowed by the proposed solar array.

This impact, in addition to any tree clearing required within the indicative development footprint, may result in a loss of habitat for threatened species, in particular the Regent honeyeater, painted honeyeater, Corben's long-eared bat, Pink-tailed worm-lizard and some flora species. It is noted though that the design of the Proposed Action will seek to minimise vegetation removal wherever possible. The Proponent intends to work with the NPWS to ensure that impacts to the surrounding Goulburn River National Park are minimised.

The Proponent considers that the Proposed Action is likely to be considered a 'controlled action' and consequently requests that it is assessed through the NSW Bilateral Agreement.



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 6

Environmental record of the person proposing to take the action

6.1 Does the person taking the action have a satisfactory record of responsible environmental management? Explain in further detail

Yes. Lightsource bp is working on five different solar projects at various stages of operation. Each of these sites has bespoke environmental management plans which are prepared and approved as part of the local authority planning permission process – these include Environmental Management Plans, Biodiversity Management Plans, Heritage Management Plans, Construction Management Plans, Waste Management Plans and more. It is anticipated that a site-specific Environmental Management Plan will be a condition of the planning approval that is currently being sought for this Proposed Action.

Lightsource bp has previously undertaken actions under the EPBC Act and has satisfactorily implemented all conditions of previous Commonwealth and State approvals.

Lightsource bp has no existing record of having been the subject to any prosecution or civil proceeding under State or Commonwealth environmental or natural resources legislation that is relevant or material to this referral.

6.2 Provide details of any past or present proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against either (a) the person proposing to take the action or, (b) if a permit has been applied for in relation to the action – the person making the application

There are no past or present proceedings under a Commonwealth, State or Territory law for the protection of the environmental or the conservation and sustainable use of natural resources applicable.

6.3 If it is a corporation undertaking the action will the action be taken in accordance with the corporation's environmental policy and framework?

Yes No

6.3.1 If the person taking the action is a corporation, provide details of the corporation's environmental policy and planning framework

Lightsource bp is committed to having no accidents, maintaining the Health & Safety of its employees, preventing harm to those who may be affected by Lightsource bp operations, and protecting the environment.

Lightsource bp's commitment to HSSE is a top priority. Everyone who works for or partners with Lightsource bp has a part to play in meeting its HSSE commitment; as such this policy applies to employees, contractors and visitors.

In order to achieve these aims and objectives, Lightsource bp is committed to:

- Providing a safe and healthy working environment for everyone: employees, contractors and visitors.
- Systematically managing its operations activities to eliminate, reduce and mitigate its risks under an integrated HSSE Management System.
- Complying with applicable laws and company policies and procedures.
- Driving continuous improvement by regular monitoring and evaluating its HSSE performance.
- Learning from both internal and external HSSE events.
- Protecting the environment in all aspects of its business and operations.
- Continue to be climate conscious by reducing its GHG emissions, protecting ecosystems and reducing waste.
- Promoting Health & Safety awareness and environmental sustainability throughout its organisation and value chain.
- Leading by example in HSSE related issues.

Lightsource bp is committed to being vigilant, disciplined and always looking out for one another.

Lightsource bp's Environmental Policy is attached in Attachment I - Lightsource bp Environmental Practice Report.

6.4 Has the person taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?

Yes No

6.4.1 EPBC Act No and/or Name of Proposal

2019/8554 LIGHTSOURCE DEVELOPMENT SERVICES AUSTRALIA PTY LTD/Energy Generation and Supply (renewable)/ Lower Wonga/Queensland/Woolooga Solar Farms (Approved with conditions)

2019/8410 LIGHTSOURCE DEVELOPMENT SERVICES AUSTRALIA PTY LTD/Energy Generation and Supply (renewable)/ 228-230 Blands Land, West Wyalong, NSW, 2671/New South Wales/West Wyalong Solar Farm, NSW (Not Controlled Action)



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 7

Information sources

Reference source

Australia ICOMOS Incorporated, 2013. Australia ICOMOS Charter of Places of Cultural Significance

Reliability

Sound

Uncertainties

None

Reference source

Commonwealth EPBC Act Protected Matters Search Tool

Reliability

Sound

Uncertainties

None

Reference source

Department of Planning, Industry and Environment [DPIE] (NSW), 2021 BioNet Atlas Threatened Species Search. Accessed 25 October 2021. Retrieved from https://www.environment.nsw.gov.au/atlaspublicapp/UI_Modules/ATLAS_/AtlasSearch.aspx

Reliability

Sound

Uncertainties

Moderate

Reference source

DPIE, 2020. Australian Soil Classification (ASC) Soil Type map of NSW. Accessed 25 October 2021. Retrieved from <https://data.gov.au/dataset/ds-nsw-22b3123a-f119-4f2d-9e84-849f03e2d976/details?q=>

Reliability

Sound

Uncertainties

None

Reference source

National Parks and Wildlife Service Lands, Guidelines for consent and planning authorities (DPIE, 2020)

Reliability

Sound

Uncertainties

None

Reference source

NSW National Parks and Wildlife Services [NPWS], 2003, Goulburn River National Park and Munghorn Gap Nature Reserve Plan of Management, NSW NPWS, Sydney

Reliability



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Sound

Uncertainties

None

Reference source

NSW Heritage Office, 1996. NSW Heritage Manual.

Reliability

Sound

Uncertainties

None

Reference source

Office of Environment and Heritage [OEH] (NSW), 2011. Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW

Reliability

Sound

Uncertainties

None

Reference source

Department of Environment, Climate Change and Water [DECCW] (NSW), 2010. Aboriginal cultural heritage consultation requirements for proponents 2010.

Reliability

Sound

Uncertainties

None



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 8

Proposed alternatives

Do you have any feasible alternatives to taking the proposed action?

Yes



No



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 9

Person proposing the action

9.1.1 Is the person proposing the action an organisation or business?
 Yes No

Organisation

Organisation name (as registered for ABN/ACN)	LIGHTSOURCE DEVELOPMENT SERVICES AUSTRALIA PTY LTD
Business name	
ABN	26623301799
ACN	
Business address	Level 19 'CBW', 181 William Street, Melbourne, 3000, Victoria, Australia
Postal address	
Main Phone number	+61409601473
Fax	
Primary email address	diana.mitchell@lightsourcebp.com
Secondary email address	

9.1.2 I qualify for exemption from fees under Regulation 5.23(1)(ii) of the EPBC Regulations because I am:
 Small business
 Not applicable

9.1.2.2 I would like to apply for a waiver of full or partial fees under Regulation 5.21A of the EPBC Regulations
 Yes No

9.1.3 Contact (for an organisation - the contact details of the person authorised to sign on behalf of the organisation)

First name	Diana
Last name	Mitchell
Job title	Principal Environmental Planner
Phone	
Mobile	+61409601473
Fax	
Email	diana.mitchell@lightsourcebp.com
Primary address	Level 10 / 420 George Street, Sydney, 2000, NSW, Australia
Address	

Declaration: Person proposing the action (To be signed by the person at 9.1.3)

I, **Diana Mitchell**, declare that to the best of my knowledge the information I have given on, or attached to the EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. I declare that I am not taking the action on behalf or for the benefit of any other person or entity.

Signature:  Date: ..21/12/2021.....

I, **Diana Mitchell**, the person proposing the action, consent to the designation of **Lightsource Development Services Australia Pty Ltd** as the proponent for the purposes of the action described in this EPBC Act Referral.

Signature:..... Date: ...21/12/2021.....



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Proposed designated proponent

9.2.1 Is the proposed designated proponent an organisation or business?
 Yes No

Organisation

Organisation name (as registered for ABN/ACN)	LIGHTSOURCE DEVELOPMENT SERVICES AUSTRALIA PTY LTD
Business name	
ABN	26623301799
ACN	
Business address	Level 19 'CBW', 181 William Street, Melbourne, 3000, Victoria, Australia
Postal address	
Main Phone number	+61409601473
Fax	
Primary email address	diana.mitchell@lightsourcebp.com
Secondary email address	

9.2.2 Contact (for an organisation - the contact details of the person authorised to sign on behalf of the organisation)

First name	Diana
Last name	Mitchell
Job title	Principal Environmental Planner
Phone	+61409601473
Mobile	
Fax	
Email	diana.mitchell@lightsourcebp.com
Primary address	Level 10 / 420 George Street, Sydney, 2000, NSW, Australia
Address	

Declaration: Proposed Designated Proponent

I, **Diana Mitchell**, the proposed designated proponent, consent to the designation of myself as the proponent for the purposes of the action described in this EPBC Act Referral.

Signature:  Date: ..21/12/2021.....



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Referring party (person preparing the information)	
9.3.1 Is the referring party an organisation or a business?	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Organisation	
Organisation name (as registered for ABN/ACN)	UMWELT (AUSTRALIA) PTY. LTD.
Business name	UMWELT
ABN	18059519041
ACN	
Business address	75 York Street, Teralba, 2284, NSW, Australia
Postal address	
Main Phone number	1300793267
Fax	
Primary email address	info@umwelt.com.au
Secondary email address	
9.3.2 Contact (for an organisation - the contact details of the person authorised to sign on behalf of the organisation)	
First name	Caitlin
Last name	Adcock
Job title	Principal Environmental Planner
Phone	0431031520
Mobile	
Fax	
Email	cadcock@umwelt.com.au
Primary address	Ground Floor, Unit 2, 99 Northbourne Avenue, Turner, 2612, ACT, Australia
Address	
Declaration: Referring party (person preparing the information)	
I, _____, declare that to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence.	
Signature: <i>Caitlin Adcock</i>	Date: ..21/12/2021.....



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Appendix A	
Attachment	
Document Type	File Name
action_area_images	Attachment A Site Context and Project Area.pdf
action_area_images	Attachment B Indicative Maximum Development Footprint.pdf
action_area_images	21108_GoulburnRivSiteboundary_Rev3_MGA56.shp
action_area_images	Attachment C Proposed Access Route .pdf
supporting_tech_reports	Attachment G PMST Likelihood of occurrence assessment.pdf
supporting_tech_reports	Attachment D Threatened Ecological Communities.pdf
supporting_tech_reports	Attachment E Regent Honeyeater in the Project Area.pdf
supporting_tech_reports	Attachment F Preliminary PCT Mapping in the Project Area.pdf
supporting_tech_reports	Attachment H Protected Matters Search Report.pdf
corp_env_policy_docs	Attachment I Lightsource bp Environmental Practice Report.pdf

Appendix B	
Coordinates	
Area 1	
-32.307767499045,150.11621736306	
-32.308976738663,150.1159971878	
-32.307585269821,150.10542049864	
-32.307104796471,150.10176815068	
-32.306726959558,150.09889658629	
-32.306704981601,150.09872955663	
-32.306674762007,150.09849989444	
-32.306622574349,150.09810321068	
-32.306218190593,150.09502956085	
-32.303088555302,150.09560029937	
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-32.302534110596,150.0913243402	
-32.302508501542,150.09112674329	
-32.302501868143,150.09107556737	
-32.303017835281,150.08908519681	
-32.303015101342,150.08896725702	
-32.301942667896,150.08694674927	
-32.301499964028,150.08360648373	
-32.298924030495,150.08037289847	
-32.290844041895,150.07474943502	
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