



Wellington North Solar Farm

State Significant Development Assessment
SSD 8895

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Executive Summary

Lightsource bp Pty Ltd (Lightsource bp) proposes to develop a 300 megawatt (MW) solar farm approximately 7 kilometres (km) north east of Wellington in the Central West and Orana Region of NSW (see **Figure ES 1**).

The project is located in proximity to the Mitchell Highway and Golden Highway, and would connect to the electricity network at TransGrid's existing Wellington substation located 2 km south of the site. The site is located in a rural area, with six non-associated residences located within 1 km of the development footprint and immediately north of the Wellington Solar Farm.

The proposed solar farm infrastructure is relatively low-lying (solar panels up to 4 m high) and the site and surrounds comprise gently undulating land that has been highly disturbed from a history of prolonged agricultural practices. The site is mostly cleared of native vegetation.

The project has a capital investment of \$540 million and would generate 400 jobs during construction and 4 jobs during operations.

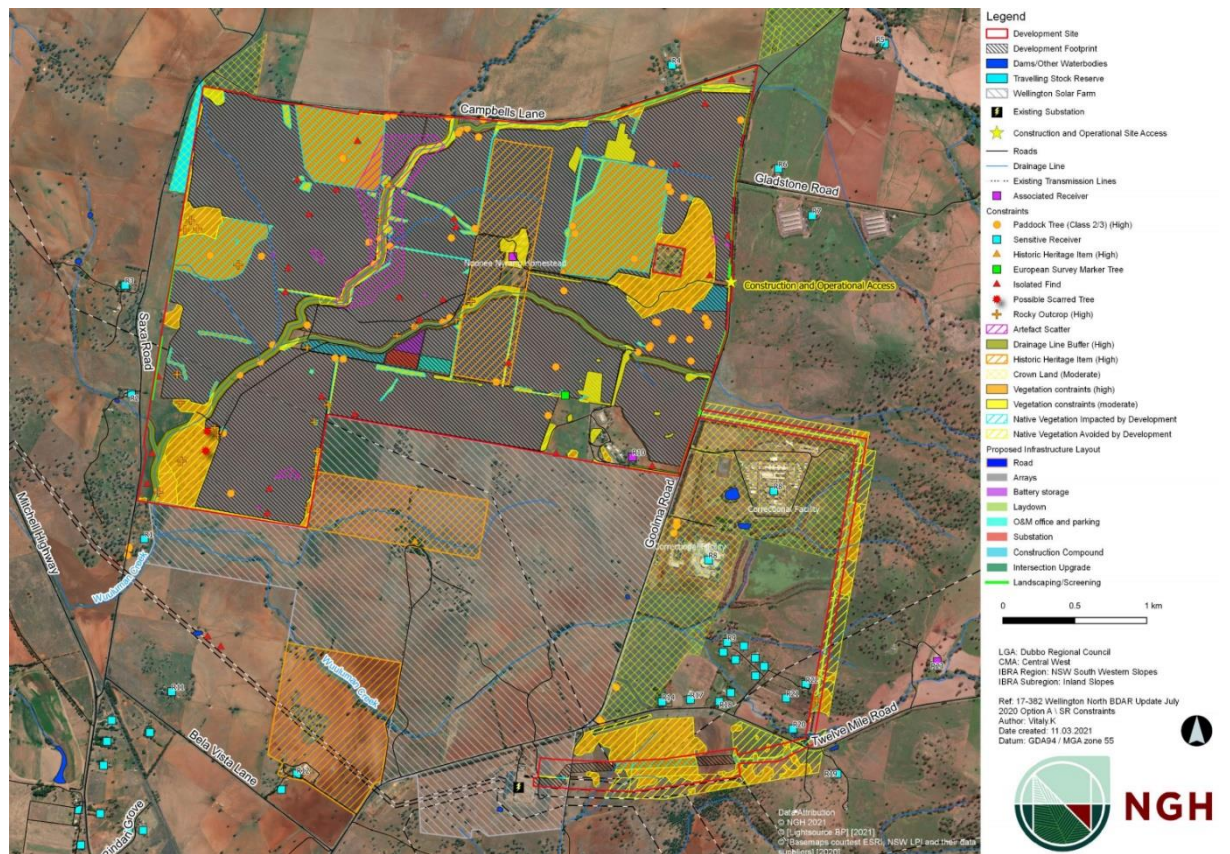


Figure ES-1 | Project Site and Surrounds

The project is located in an area that could contribute to the pilot Renewable Energy Zone in the Central West and Orana Region, as identified in the NSW Government's *Electricity Strategy*, with access to the electricity grid at a location with available network capacity.

Although the EIS was submitted in August 2018, prior to the release of the *Large-Scale Solar Energy Guideline* in December 2018, its assessment is broadly consistent with the principles of the Guideline. The project is also consistent with the NSW *Climate Change Policy Framework, Net Zero Plan Stage 1*:

2020 – 2030 and *Electricity Strategy*, as it would contribute 300 MW of renewable energy to the National Electricity Market.

The project is classified as State significant development under the *Environmental Planning and Assessment Act 1979* (EP&A Act) as it is development for the purpose of electricity generating works with a capital investment value of more than \$30 million. The Minister for Planning and Public Spaces is the consent authority for the development. However, under the Minister's delegation, the Executive Director – Energy, Industry and Compliance, may determine the development application as Council did not object, there were less than 50 unique objections from the public and a political donations disclosure statement has not been made.

Engagement

The Department exhibited the Environmental Impact Statement for the project and received four public submissions (two supporting and two objecting to the project). Advice was also received from nine government agencies, including Dubbo Regional Council.

The Department also consulted with Council and relevant government agencies on key issues and inspected the site in November 2017 and February 2021. No agencies objected to the project, subject to the implementation of appropriate mitigation and management measures.

The public submissions supporting the project cited the project's contribution to reducing greenhouse gas emissions and climate change, and were received from residents located adjacent to the site and from within Wellington township.

The public submissions objecting to the project raised concerns including land use compatibility, amenity impacts and site rehabilitation and were from residents located approximately 1.5 km north east of the site towards Bodangora village.

Lightsource bp has responded to matters raised in all submissions. The Department has considered these matters in its assessment and incorporated them in the recommended conditions where relevant.

Assessment

The Department has undertaken a comprehensive assessment of the merits of the project and considered all potential issues in accordance with the requirements of the *Environmental Planning and Assessment Act 1979*. The key assessment issues identified for the project are land use compatibility and cumulative impacts, visual amenity, traffic impacts and biodiversity.

The development footprint is 815 hectares (ha) and is currently used for agricultural purposes, including grazing and cropping. Although the development footprint is located on soils classified as Class 3 and Class 4 under the *Land and Soil Capability Mapping in NSW* (OEH, 2017) and the site is also mapped as Biophysical Strategic Agricultural Land (BSAL), site soil surveys indicated there were limitations to sustained cultivation.

The Department considers with other approved and operational SSD solar farms in the Central West and Orana Region that the loss of 3,890 ha of agricultural land represents a very small fraction (~0.044%) of the 8.9 million ha of land being used for agricultural output in the Central West and Orana Region and would result in a negligible reduction in the overall productivity of the region. Similarly, the area of BSAL on the site is 815 ha which equates to approximately 0.82 % of the mapped BSAL in the Dubbo Regional LGA.

The Department accepts that the project would reduce the agricultural output of the site, but notes that the low intensity nature of the project would not significantly reduce the inherent agricultural capability

of the site, and is satisfied that the site could be readily returned to agricultural use in the future following decommissioning and rehabilitation. Nonetheless, to maintain some agricultural productivity during the operation of the project, Lightsource bp is proposing to graze sheep on the site.

Wellington Solar Farm is located immediately south of the site and construction is nearing completion with a capacity of up to 200 MW and development footprint of 316 ha. The Department accepts that with the approved Wellington Solar Farm, there is a further change to the broader visual landscape surrounding the project and a combined development footprint of approximately 1,103 ha.

The Department notes that the two projects are largely separated by a ridgeline running east to west, which would restrict views of both projects particularly from the south and in other locations the projects would appear as one contiguous solar farm, as opposed to two discrete developments.

While Lightsource bp has designed the project to minimise visual impacts, portions of the project would be visible from surrounding residences. However, the level of potential visual impact to most surrounding residences would not be significant due to the intervening vegetation, topography and distance and proposed landscape screening.

In regard to residences surrounding the site, the visual impacts of the project would not be significant due to the intervening topography and existing vegetation within the region and landscaping buffers. There would be low cumulative visual impacts to users of Saxa and Goolma Road once landscaping in key areas is established.

The potential traffic impacts from the 24 month construction period would be relatively short-term, minor in nature and can be managed in accordance with Government policy. The proposed road upgrades have been designed to satisfy the relevant road safety standards, and the requirements of Council and Transport for NSW. Although there are nine approved or proposed State significant solar farms and wind farms in the Wellington area, the construction periods of these projects are unlikely to significantly overlap as they are either constructed or early in the planning process, and the project shares only a small section of its local transport route with the proposed Uungula Wind Farm. Further, the Department has recommended strict conditions requiring relevant road upgrades and a comprehensive Traffic Management Plan.

While the project has been designed to avoid approximately 160 ha of good to moderate quality native vegetation, it would still require clearing of native woodland (24.5 ha and 32 paddock trees) and disturb native grassland (93.1 ha) largely in poor condition. The residual biodiversity impacts of the project would be offset in accordance with *NSW Biodiversity Offsets Scheme*, noting that a large proportion (around 80 %) of the vegetation to be cleared is not of sufficient quality to require offsetting under the Scheme.

The layout of the solar farm has also been designed to avoid impacts on Aboriginal heritage and riparian zones. The project also avoids direct impacts to the Noonee Nyrang Homestead which is listed as a heritage item with local significance under the *Wellington Local Environment Plan 2012*.

The Department has recommended a condition requiring an accommodation and employment strategy be prepared and implemented by Lightsource bp, in consultation with Council, to ensure there would be sufficient accommodation to house construction workers, and to prioritise the employment of local workers and consider construction of other projects in the region such as the proposed Uungula Wind Farm.

To address the residual impacts of the project, including heritage, water, erosion, noise, bushfires and other hazards, the Department has recommended a range of strict conditions, developed in conjunction with agencies and Council, to ensure these impacts are effectively minimised or offset.

Summary

Overall, the Department considers that the project achieves an appropriate balance between maximising the efficiency of the solar resource and minimising the potential impacts on surrounding land uses, the amenity of local residents and the environment.

The site has good solar resources and available capacity on the existing electricity network, and the project has been designed to largely avoid key constraints, including amenity impacts on nearby residences, watercourses, remnant native vegetation and heritage sites.

The Department considers that any residual impacts would be relatively minor and can be managed through the recommended conditions of consent.

Importantly, the project would generate enough renewable energy to power over 112,200 homes and save over 635,700 tonnes of greenhouse gas emissions per year. It would also provide substantial economic benefits through job creation and capital investment in the region.

On balance, the Department considers that the project is consistent with government policy and is in the public interest. It should therefore be approved, subject to the recommended conditions of consent.

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1. Project

Wellington North Solar Farm Pty Ltd, a wholly owned subsidiary of LS Australia FinCo 2 Pty Ltd (Lightsource bp), proposes to develop a new State significant development solar farm approximately 7 kilometres (km) north east of Wellington in the Dubbo Regional local government area (LGA) (see **Figure 1**).

Whilst the development application for the project was lodged by AGL Pty Ltd, Lightsource bp purchased the project in July 2020, during the Department’s assessment of the project.

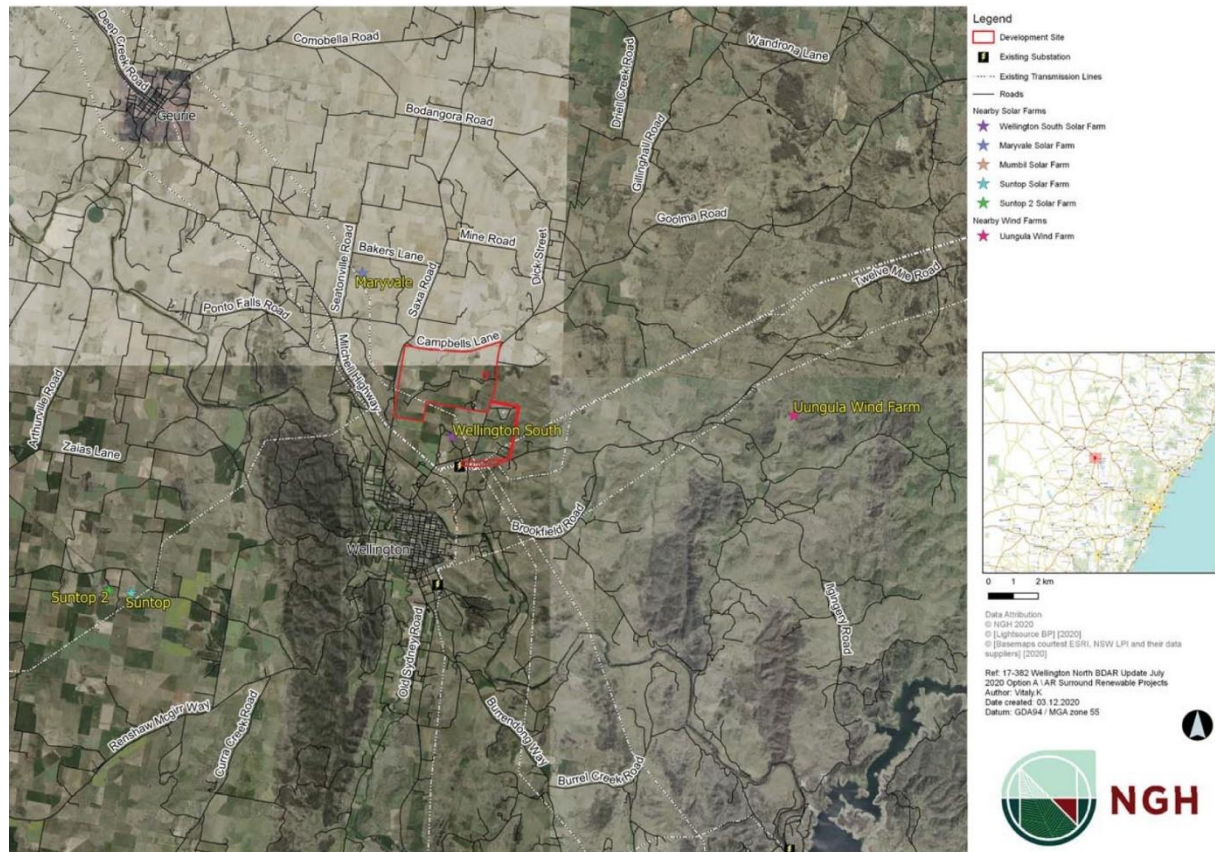


Figure 1 | Regional Context

The project involves the construction of a new solar farm with a generating capacity of approximately 300 megawatts (MW). It also involves the upgrading and decommissioning of infrastructure and 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 solar farm would connect to TransGrid’s existing Wellington substation, which is located approximately 2 km south of the project site.

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

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 300 MW; • approximately 1,200,000 fixed or single-axis tracking solar panels (up to 4 m high) and 155 inverter stations (up to 3 m high); • an on-site substation and a 330 kV overhead transmission line connecting to TransGrid's Wellington substation; • internal access tracks, staff amenities, maintenance buildings (up to 5 m high), offices, laydown areas, car park, fire breaks, vegetation screening and security fencing; and • an area for potential future battery storage, however no battery storage is currently proposed.
Project area	978 ha (with an 815 ha development footprint)
Access route and site access	Over-dimensional and heavy vehicles would access the site via the Mitchell Highway and Goolma Road.
Site entry	A single, existing site access on Goolma Road would be upgraded and used for all traffic during construction and operation.
Road upgrades	Intersection upgrades at Goolma Road and the new site access, including provision of a short Auxiliary Left Turn Treatment (AUL) northbound, and Basic Right Turn Treatment (BAR) southbound.
Construction	<ul style="list-style-type: none"> • The construction period would last for up to 24 months, including a peak period of up to 9 months. • Construction hours would be limited to Monday to Friday 7 am to 6 pm, and Saturday 8 am to 1 pm.
Operation	<ul style="list-style-type: none"> • The expected operational life of the infrastructure is approximately 30 years. However, the project may involve infrastructure upgrades that could extend the operational life.
Decommissioning and rehabilitation	<ul style="list-style-type: none"> • The project also includes decommissioning at the end of the project life, which would involve removing all infrastructure.
Hours of operation	Daily operations and maintenance would be undertaken Monday to Friday 7 am – 6 pm, and on Saturday 8 am – 1 pm.
Employment	Up to 400 construction jobs and 4 operational jobs.
Capital investment value	\$540 million

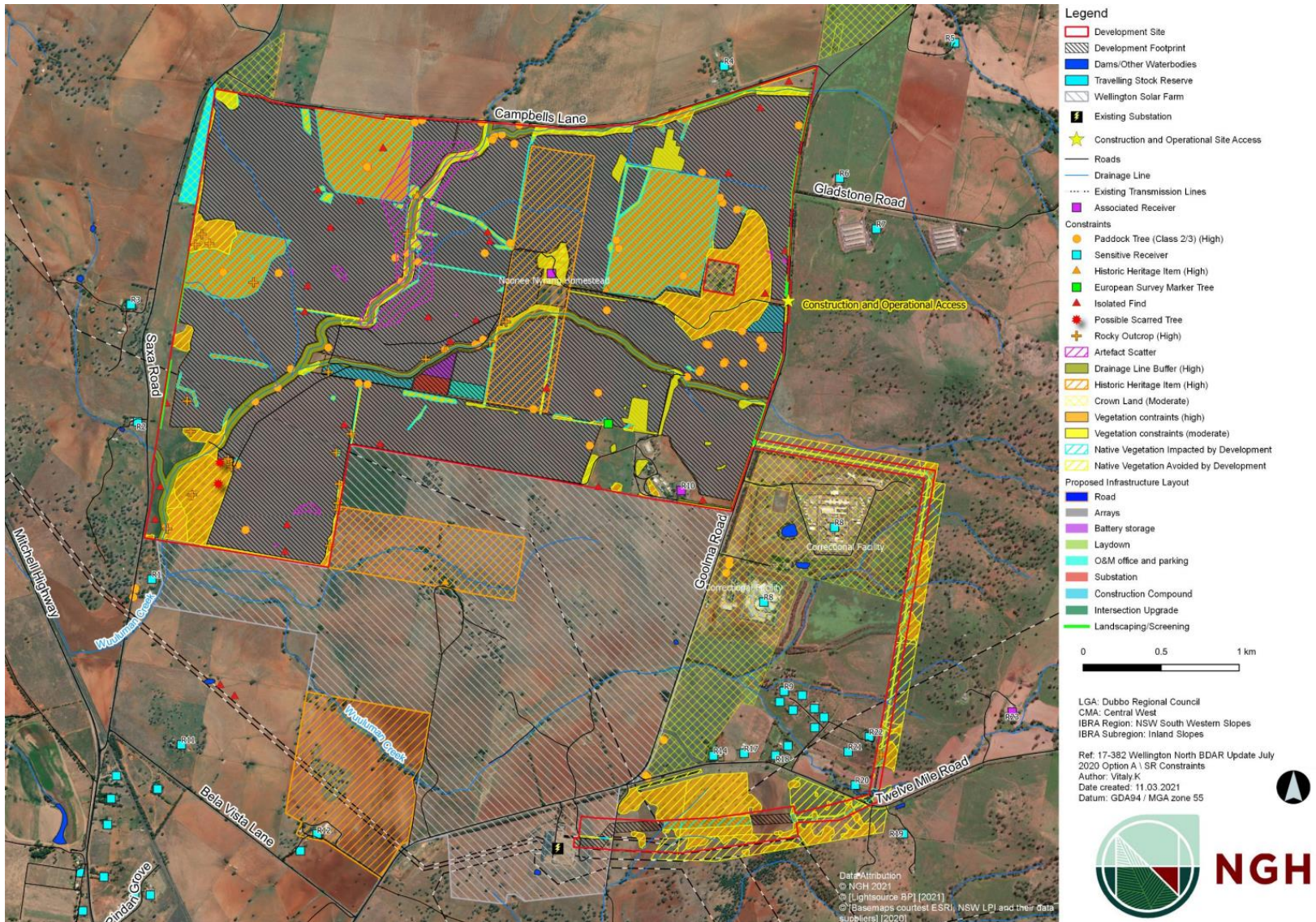


Figure 2 | Project Layout

2. Strategic Context

2.1 Site and Surrounds

The project is located on a 978 hectare (ha) site in the Central West and Orana Region of NSW. The majority of the site (as shown in **Figure 3**) is zoned RU1 – Primary Production, with part of the transmission line zoned SP2 – Electricity Supply, under the *Wellington Local Environment Plan 2012* (Wellington LEP). The site is currently used for agricultural purposes, including grazing of livestock and cultivation of crops, such as wheat and other cereals.



Figure 3 | Project Site

The site is mapped as Biophysical Strategic Agricultural Land (BSAL) and, under the *Land and Soil Capability Mapping in NSW* (OEH, 2017) is categorised as Class 3 (land with high capability and moderate limitations requiring careful management for cropping and intensive grazing) and Class 4 (land with moderate capability, requiring specialised management practices, expertise, inputs and technology to manage productivity). Land use impacts are considered further in **section 5.1**.

The site comprises low lying and gently undulating land, predominantly cleared of vegetation. The site lies within the Macquarie-Bogan catchment with Wuuluman Creek and its ephemeral tributaries traversing the site.

The proposed development footprint is approximately 815 ha and was designed to largely avoid site constraints, including watercourses, remnant native vegetation and the Noonee Nyrang homestead which is of local heritage significance (see **Figure 2**).

Land use surrounding the site is varied, including farming land zoned RU1 largely used for agricultural purposes similar to the project site, land zoned SP2 hosting electrical and social infrastructure

(TransGrid's Wellington substation and the Wellington and Macquarie Correctional Centres), and residential housing on land zoned R5 south east of the site near the proposed transmission line (See **Figure 2**).

Campbells Lane and Goolma Road border the northern and eastern boundaries of the site respectively, and Saxa Road (formerly Cobbora Road) runs roughly parallel to the site's western boundary. The site is bound by the approved Wellington Solar Farm to the south. The Mitchell Highway and Main Western Railway are located approximately 750 m south west of the project site. The project would connect to TransGrid's Wellington substation, which has sufficient capacity to accommodate the project.

There are six non-associated residences within 1 km of the project site, none of which objected to the project, with the closest dwellings located approximately 243 m north (R4) and 208 m west (R2) of the development footprint.

2.2 Other Energy Projects

The Central West and Orana Region has attracted considerable interest from solar developers given the presence of major transmission lines and existing electricity substations. There are four approved (including one operational and one under construction) and two proposed State significant development (SSD) solar projects within approximately 50 km of the site (see **Table 2** and **Figure 4**).

Table 2 | Nearby energy projects

Project	Capacity (MW)	Status	Approximate distance from the project (km)
Wellington Solar Farm	174	Under Construction	Adjacent to the site
Maryvale Solar Farm	125	Approved	2.5
Bodangora Wind Farm	120	Operational	6
Suntop Solar Farm	170	Under Construction	12
Suntop Stage 2 Solar Farm	165	Proposed	13
Uungula Wind Farm	388	Proposed	16
Mumbil Solar Farm	140	Proposed	23
Burrendong Wind Farm	400	Proposed	23
Beryl Solar Farm	87	Operational	48

Given its proximity to the Wellington Solar Farm, the project may result in limited cumulative visual and noise impacts to some nearby receivers. These impacts are further discussed in **sections 5.2** and **5.3** respectively. Additionally, while the surrounding regional road network may experience an increase in traffic numbers, there would be no significant cumulative impact on the local roads along the proposed transport route from these projects, as discussed further in **section 5.3**. Other potential cumulative impacts with nearby solar farms include reduction in agricultural productivity and availability of workforce accommodation. The potential cumulative impact on agricultural productivity is discussed in **section 5.1**.

There is potential for the construction of the project to overlap with the construction of the proposed Maryvale Solar Farm (approved but construction has not commenced) and Suntop Solar Farm (construction has commenced). There is also potential for construction of the project to overlap with the proposed Uungula Wind Farm, which shares a common haulage route with the project. Suntop Stage 2

Solar Farm, Mumbil Solar Farm and Burrendong Wind Farm are all at preliminary stages in the process with development applications not yet submitted but would not share any common haulage routes other than State roads to the region. If approved, workforce accommodation for these projects would likely be sourced from the local and wider region, including neighbouring towns and LGAs, as discussed further in **section 5.3**.

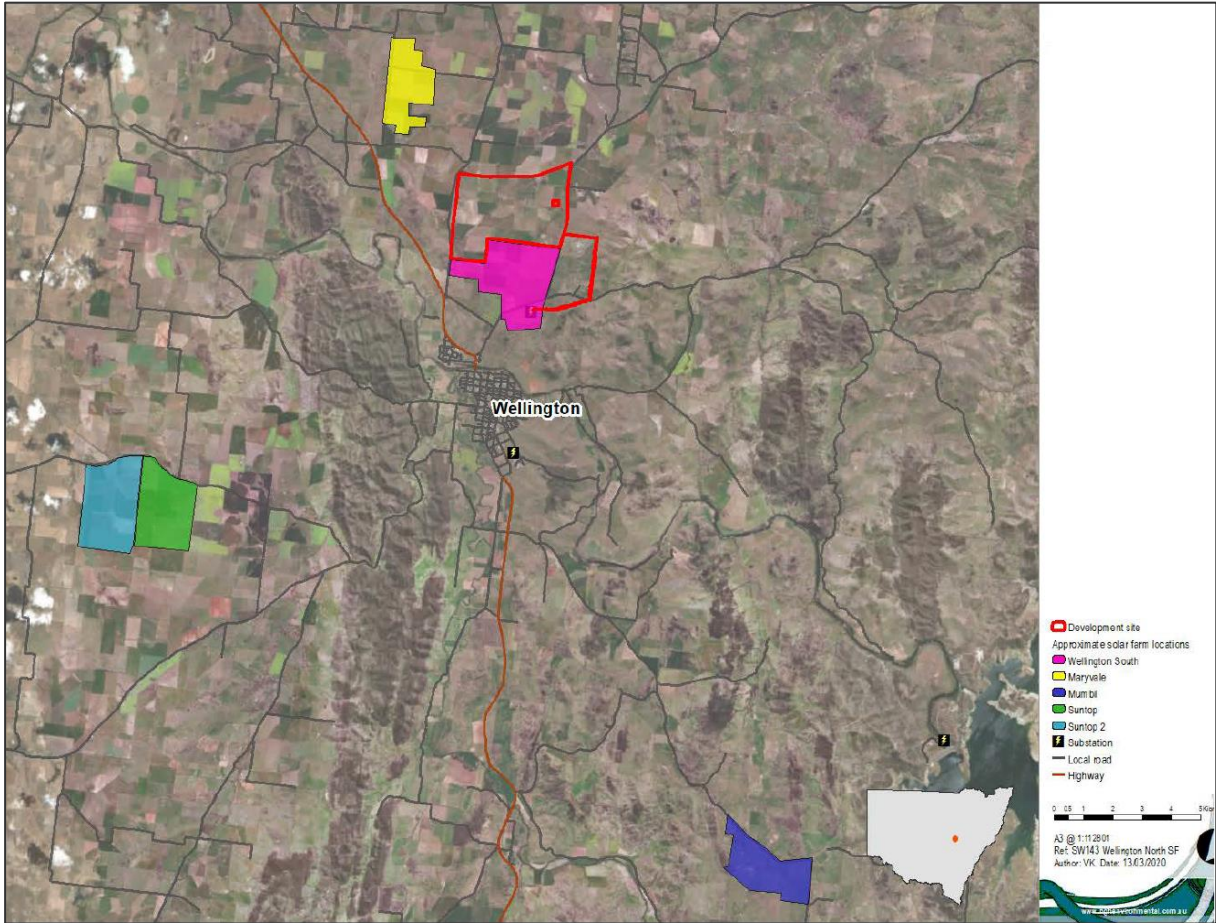


Figure 4 | Nearby State Significant Solar Farms

2.3 Energy Context

In 2019, NSW derived approximately 18.7 % of its energy from renewable sources. The rest was derived from fossil fuels, including 76.7 % from coal and 4.1 % from gas. However, there are currently no plans for the development of new coal power stations in NSW, and the development of renewable energy sources, like wind and solar farms, is experiencing rapid growth.

This is highlighted in the 2017 *Independent Review into the Future Security of the National Electricity Market* (the Finkel Review), which outlines a strategic approach to ensuring an orderly transition from traditional coal and gas fired power generation, to power generation with lower emissions. It notes that Australia is heading towards zero emissions in the second half of the century.

The *United Nations Framework Convention on Climate Change* has adopted the Paris Agreement, which aims to limit global warming to well below 2°C, with an aspirational goal of 1.5°C. Australia’s contribution towards this target is a commitment to reduce greenhouse gas emissions by 26% to 28% below 2005 levels by 2030.

The *NSW Climate Change Policy Framework*, released in November 2016, sets an aspirational objective for NSW to achieve net zero emissions by 2050. NSW's *Net Zero Plan Stage 1: 2020 – 2030*, released in March 2020, builds on the framework and sets out how the NSW Government will deliver on this objective, and fast-track emissions reduction over the next decade.

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 the assessment of large-scale solar projects, and identify the key planning considerations relevant to solar energy development in NSW.

The Guideline aims to support the growth of the solar industry, whilst ensuring that impacts are adequately assessed, effective stakeholder engagement is undertaken, and that attracting investment is balanced with considering the interests of the community. Although Lightsource bp submitted its EIS in August 2018, prior to the release of the Guideline, its assessment is consistent with the principles of the Guideline.

The Guideline also acknowledges that large-scale solar projects could help reduce reliance on fossil fuels, thereby contributing to reductions in air pollution and greenhouse gas emissions, whilst also supporting regional NSW through job creation and investment in communities that may not have similar opportunities from other industries.

NSW is one of the nation's leaders in large-scale solar, with 14 major operational projects and an additional nine under construction.

In March 2018, the NSW Government's *Transmission Infrastructure Strategy* identified 10 potential Energy Zones across three broad regional areas, including the New England, Central West and South West regions of NSW. The identified energy zones are aimed at encouraging "*investment in new electricity infrastructure and unlocking additional generation capacity in order to ensure secure and reliable energy in NSW.*"

Building on this, the NSW Government announced the *NSW Electricity Strategy* in November 2019, which adopted the Central West and Orana Region as the pilot Renewable Energy Zone (REZ) to support transmission upgrades in this zone. The strategy proposes NSW Government support for this REZ to unlock regional investment and new energy generation infrastructure and for the development of new transmission infrastructure to connect low cost generation to the electricity system.

The project is located in the Central West and Orana REZ and would have access to the electricity grid at a location with available network capacity. With a capacity of 300 MW, the project would generate enough electricity to power about 112,000 homes and is therefore consistent with the *NSW Climate Change Policy Framework*, *Net Zero Plan Stage 1: 2020 – 2030* and *NSW Electricity Strategy*.

3. Statutory Context

3.1 State Significant Development

The project is classified as State significant development under Section 4.36 of the *Environmental Planning & Assessment Act 1979* (EP&A Act). This is because it triggers the criteria in Clause 20 of Schedule 1 of *State Environmental Planning Policy (SEPP) (State and Regional Development) 2011*, 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 and Public Spaces is the consent authority for the development. However, under the Minister's delegation of 9 March 2020, the Executive Director – Energy, Industry and Compliance, may determine the development application as Council did not object, there were less than 50 unique objections from the 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 Regulations), a development application can be amended at any time before the application is determined. Accordingly, Lightsource bp has sought to amend its application, the details of which are summarised in **section 4.4** of this report.

The Department considers that it can accept Lightsource bp's amended application for the following reasons:

- the project amendments would not substantially increase the impacts of the project as a whole;
- the amended application is required to ensure there is a viable connection to the electricity grid for the project;
- Lightsource bp has assessed the impacts of the amended project (see **Appendix G**);
- the Department has made the additional information available online and sent it to relevant government agencies for comment; and
- no representations have been made by the community or special interest groups opposing the amended application.

The project amendments are summarised in **section 4.4** of this report.

3.3 Permissibility

The main site is located wholly within land zoned RU1 Primary Production under the Wellington LEP, with parts of the transmission line occurring on lands zoned SP2 Electricity Supply. The RU1 zone includes various land uses that are permitted both with and without consent. As electricity generating works are not expressly listed as permitted with or without consent, it is a prohibited land use under a strict reading of the LEP. However, the LEP expressly references the *State Environmental Planning Policy (Infrastructure) 2007* (Infrastructure SEPP) and acknowledges that electricity generating works are regulated by the Infrastructure SEPP rather than the LEP.

Under the Infrastructure SEPP, electricity generating works are permissible on any land in a prescribed rural, industrial or special use zone. Land zoned RU1 Primary Production and SP2 Electricity Supply are prescribed rural and special use zones respectively, pursuant to the Infrastructure SEPP. Consequently, the project is permissible with 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 SSD 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.

The project requires approval under the *Roads Act 1993* to upgrade the existing site access on Goolma Road.

The Department has consulted with 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**).

Lightsource bp has not referred the project to the Commonwealth Minister for the Environment under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) as it considers surveys undertaken to date have not identified any significant impacts on matters of national environmental significance listed under the EPBC Act.

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. These matters are summarised as:

- the provisions of environmental planning instruments (including draft instruments), development control plans, planning agreements, and the EP&A Regulations;
- the environmental, social and economic impacts of the development;
- the suitability of the site;
- any submissions; and
- the public interest, including the objects in the EP&A Act and the encouragement of ecologically sustainable development (ESD).

The Department has considered all of these matters in its assessment of the project, as well as Lightsource bp's consideration of environmental planning instruments in its EIS, as summarised in **section 5** of this report. The Department has also given consideration to the relevant provisions of the environmental planning instruments in **Appendix D**, and concluded that the project is consistent with objectives of those instruments.

4. Engagement

4.1 Department's Engagement

The Department publicly exhibited the EIS from 22 August 2018 to 19 September 2018, advertised the exhibition in the *Dubbo Mailbox Shopper*, *Wellington Times* and *Dubbo Daily Liberal* and notified landowners adjacent to the project boundary.

The Department also consulted with Council and the relevant government agencies throughout the assessment and inspected the site and surrounds on 21 November 2017 and 9 February 2021.

The Department notified and sought comment from TransGrid and Transport for NSW (TfNSW) (formerly Roads and Maritime Services) in accordance with the Infrastructure SEPP, and this is discussed further in **section 4.5**.

4.2 Lightsource bp's Engagement

Lightsource bp and AGL undertook engagement with the surrounding community as detailed in the EIS, including newspaper advertisements, community meetings and information sessions, individual meetings with adjacent landowners and made information about the proposal available via a project newsletter and its website. Lightsource bp also undertook consultation with the Department, Council and relevant government agencies during the assessment process.

Lightsource bp consulted with landowners adjacent to the amended transmission line route (as shown in **Figure 2**), some of whom raised concerns regarding amenity, health and property values. These issues are further discussed in **sections 5.2 and 5.3**.

4.3 Submissions and Response to Submissions

During the exhibition period for the EIS, the Department received 4 public submissions, consisting of 2 objections, and two in support.

Advice was also received from nine government agencies, including comments from Dubbo Regional Council.

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

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

4.4 Amended Application

Following consideration of the public submissions and agency advice on the project, and in response to grid connection requirements, Lightsource bp amended its application on two occasions, in August 2019 and February 2021, as detailed in the Amendment Reports (see **Appendix G**).

The amended application includes:

- realigning the transmission line, including two possible options for connection to the TransGrid substation;
- revising the transport route, travelling along Mitchell Highway and Goolma Road; and
- relocating the primary site access to Goolma Road, constructing an AUL and BAR treatment.

The amendments to the project are summarised in **Table 3**.

Table 3 | Amendments to the project during the assessment process

Project Aspect	EIS (August 2018)	Final Proposed Project (February 2021)
Transmission Line	<p>Two transmission line route options, running either above or below ground, for connection to the TransGrid substation:</p> <ul style="list-style-type: none"> an eastern easement running adjacent to Goolma Road; or a western easement running along Saxa Road and parallel to Bela Vista Lane. 	<p>One transmission line route option for connection to the TransGrid substation:</p> <ul style="list-style-type: none"> an overhead line running to the east of the Wellington Correctional facility; and a development envelope for the final 1.2 km, which would either be above or below ground.
Site Access	<ul style="list-style-type: none"> Primary site access on Campbells Lane for all Heavy Traffic and all traffic during construction, upgrading or decommissioning. Two alternative site access points on Goolma Road for light vehicles during operation. 	<ul style="list-style-type: none"> A single, newly constructed site access point for all traffic on Goolma Road. Closure of an existing site access point on Goolma Road.
Transport Route	<ul style="list-style-type: none"> Golden Highway, Saxa Road and Campbells Lane. 	<ul style="list-style-type: none"> Mitchell Highway and Goolma Road.
Road Upgrades	<ul style="list-style-type: none"> Upgrades to the intersection of Saxa Road and Campbells Lane. Bituminous Surface applied to sections of Campbells Lane. 	<ul style="list-style-type: none"> Upgrade to the intersection of Goolma Road with the new site access point, with application of AUL (northbound) and BAR (southbound) treatments.
Construction compound Location	<ul style="list-style-type: none"> Construction compound located near the primary site access on Campbells Lane. 	<ul style="list-style-type: none"> Construction compound located adjacent to the site access on Goolma Road.
Construction workforce	<ul style="list-style-type: none"> Estimated peak construction workforce of 250 people. 	<ul style="list-style-type: none"> Estimated peak construction workforce of 400 people.

In its amendment report, Lightsource bp assessed all potential additional impacts associated with the amended transmission line route, transport route and site access.

The Department provided the Amendment Report to government agencies for review and comment and made it available on the Department’s website. As the project amendments would not increase the impacts of the project as a whole, the Department did not exhibit the Amendment Report.

4.5 Key Issues – Government Agencies

Dubbo Regional Council did not object to the project, but initially raised concerns about the project’s cumulative impacts with other nearby SSD solar farms, including loss of agricultural land, visual amenity and potential traffic impacts. These matters are discussed in **sections 5.1, 5.2 and 5.3** and, where required, incorporated into the conditions of consent. Council initially sought development contributions of 1% of the project’s capital investment value, but will continue to discuss community contributions separately with the Applicant. The Department has considered this further in **section 5.3**.

The **Department’s Biodiversity, Conservation and Science Division (BCS)** (formerly Office of Environment and Heritage) made recommendations that further avoidance of biodiversity impacts should be investigated when confirming the final transmission line route, which had not been determined at the EIS stage. Lightsource bp has since amended the development application to propose a new

transmission line route (**Figure 2**), the impacts of which have been assessed to BCS's satisfaction. BCS has confirmed it has no residual concerns. Biodiversity impacts are discussed further in **section 5.3**.

DPI Agriculture (formerly the Department of Primary Industries) requested information on current agricultural productivity of the site to assist with establishing rehabilitation baselines for decommissioning purposes, and recommended conditions surrounding rehabilitation of the site. Lightsource bp provided this information (see **Appendix C**), and DPI Agriculture' suggested conditions have been incorporated into the recommended conditions of consent. Impacts on agricultural land are further considered in **section 5.1**.

The **Department's Water Group** (DPIE Water) advised that the project should allow sufficient setbacks from on-site watercourses in accordance with the *Guidelines for Controlled Activities on Waterfront Land* (NRAR, 2018), with an on-site fourth order stream, Wuuluman Creek, requiring a 40 m setback of solar farm infrastructure. The Department has included this as a requirement in its recommended conditions. This matter is further discussed in **section 5.3**.

Transport for NSW (TfNSW) (formerly Roads and Maritime Services) expressed concern regarding the uncertainty of light vehicle traffic volumes accessing the site, given that up the project would host up to 400 construction workers during the peak construction period. The Department has considered this advice and recommended conditions requiring Lightsource bp to develop a Traffic Management Plan, providing details of a shuttle bus service for the project and measures to encourage car-pooling. TfNSW confirmed it did not have any concerns regarding access to the proposed transmission line.

In response to project amendments, TfNSW raised concern regarding the Safe Intersection Site Distance (SISD) of the existing access on Goolma Road. In response, Lightsource bp has committed to closing the existing site access, which would be relocated 40 m north. TfNSW reviewed these amendments and raised no further concerns. Traffic and transport impacts have been further considered in **section 5.3**.

The **Heritage Council of NSW** (Heritage NSW) noted that no State registered heritage items are present within the project site, but requested that an Historic Heritage Archaeological Assessment be completed, which Lightsource bp provided. Heritage Council confirmed it had no residual concerns. Heritage impacts are further considered in **section 5.3**.

The **Rural Fire Service** (RFS) and **Fire and Rescue NSW** (FRNSW) recommended requirements related to bushfire and hazard preparation and management, which have been incorporated into the recommended conditions of consent.

Regional NSW – Mining, Exploration and Geoscience (MEG, formerly Division of Resources and Geoscience) acknowledged Lightsource bp's consultation with exploration licence titleholders and confirmed it is satisfied that the project would not sterilise any mineral resources.

The **Environment Protection Authority** (EPA) raised no concerns, but made recommendations on waste management, which have been incorporated in the conditions of consent.

4.6 Key Issues – Community

The four public submissions received were all from residents within 5 km of the project site, with the nearest submitter located adjacent to the site at R3 (135 m). The Department received two submissions in support of the project and two objections.

The submitter adjacent to the site (135 m) supported the project, but raised concerns about the project's potential impacts on agricultural land and amenity (noise, dust, traffic and road safety). Both objections were received by residents of Bodangora, approximately 1.5 km North of the site, raising concern with the project's impacts on visual amenity, rehabilitation, land use compatibility and loss of property values. These matters are further considered in **section 5** of this report.

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 compatibility of the proposed land use, construction traffic, visual impacts and biodiversity.

The key constraints for the project are shown in **Figure 3**. The Department has also considered the full range of potential impacts associated with the project and has included a summary of the conclusions relating to these in **section 5.3**. A list of the key documents that informed the Department's assessment is provided in **Appendix A**.

5.1 Compatibility of the Proposed Land Use

Provisions of the Wellington LEP

The main site is located wholly within the RU1 Primary Production zone under the LEP. Part of the transmission line would also be located within land zoned SP2 Electricity Production, associated with the TransGrid substation. As discussed in **section 3.2**, a solar farm is a prohibited land use within RU1 zoning, 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 project site.

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

Secondly, the project is consistent with the objectives of the RU1 zone, particularly in relation to:

- encouraging diversity in primary industry enterprises and systems appropriate for the area; and
- minimising fragmentation and alienation of resource lands.

While the Dubbo Regional LGA has traditionally relied upon agriculture, the recent growth of solar energy generation in the area is contributing to a more diverse local industry, thereby supporting the local economy and community. In addition, the solar farm would encourage renewable energy development which is consistent with the *Central Orana Regional Development Strategy 2018 - 2022*.

The project is consistent with the Department's *Central West and Orana Regional Plan 2036* which identifies the development of renewable energy generation as a future growth opportunity for the region.

The development would not fragment or alienate resource lands in the LGA, as the land could be easily returned to agricultural land following decommissioning and, therefore, the impact is temporary in nature as the inherent agricultural capability of the land would not be affected in the long term. It also located adjacent to an existing solar farm and a large correctional centre, and consequently there has already been a significant transition from agricultural land uses in the immediate vicinity of the site.

Potential Impacts on Agricultural Land

Three public submissions raised concern about the loss of agricultural land, particularly regarding the quality of agricultural land on the site and reduced agricultural output.

The project is located within the Central West and Orana Region of NSW, which has a strong and diverse agricultural sector, with around 8.9 million ha of this region being used for agricultural output.

The project site is mapped as Biophysical Strategic Agricultural Land (BSAL) and has historically been used for livestock grazing and dryland cropping. The site is largely mapped as capability Class 3 Rural Land Capability under the *Land and Soil Capability Mapping in NSW* (BCD, 2017). As such, the land classification suggests that the site is suited to grazing, but capable of sustained cultivation on a rotational basis with ongoing land management practices.

The Department considers with other approved and operational SSD solar farms in the Central West and Orana Region that the loss of 3,890 ha of agricultural land represents a very small fraction (~0.044%) of the 8.9 million ha of land being used for agricultural output in the Central West and Orana Region and would result in a negligible reduction in the overall productivity of the region. Similarly, the area of BSAL on the site is 815 ha which equates to approximately 0.82 % of the mapped BSAL in the Dubbo Regional LGA.

Despite being mapped as BSAL and Class 3 land at a regional scale, soil surveys conducted on the site as part of the EIS found limitations to sustained cultivation such as poor soil surface structure, with a susceptibility to produce a hard-setting surface or crust following prolonged cultivation or excessive handling.

As the site is currently used for livestock grazing and cultivation of cereal crops, the Department accepts that the development of a solar farm would reduce the agricultural output of the site whilst the solar farm remains operational. However, Lightsource bp is proposing sheep grazing on the site during operation of the project.

The Department is aware of instances where the co-location of sheep grazing on solar farms has been successfully implemented at several solar farms. Furthermore, the development would not affect the inherent agricultural capability of the land, which would be returned to agricultural use following decommissioning.

In this regard, the Department has recommended conditions requiring Lightsource bp to maintain the land capability of the site (including groundcover and maintaining grazing within the development footprint) and to reinstate the land to agricultural use following decommissioning.

The Department notes that, whilst DPI Agriculture did not raise any concerns about loss of agricultural land, Council raised concerns with the cumulative impact of multiple solar farms developments in the region may affect local agricultural productivity and the regional economy.

The development footprint of the project combined with other approved and operational SSD solar farms in the Central West and Orana Region would be approximately 3,890 ha. However, the Department considers that the loss of 3,890 ha of agricultural land represents a very small fraction (~0.044%) of the 8.9 million ha of land being used for agricultural output in the Central West and Orana Region and would result in a negligible reduction in the overall productivity of the region. Similarly, the loss of the loss of 815 ha of BSAL equates to approximately 0.82 % of the mapped BSAL in the Dubbo Regional LGA.

The potential loss of a small area of cropping and grazing land in the region must be balanced against:

- the broader strategic goals of the Commonwealth and NSW governments for the development of renewable energy into the future;
- the environment benefits of solar energy, particularly in relation to reducing greenhouse gas emissions; and
- the economic benefits of solar energy in an area with good solar resources and capacity in the existing electricity infrastructure.

Based on these considerations, the Department considers that the proposed solar farm represents an effective and compatible land use within the region.

5.2 Visual

Concerns about visual impacts were raised in the two objections to the project from the community and Council sought additional landscaping around the entire perimeter of the site. Both objections were received from Bodangora, located approximately 1.5 km to the north of the project. Whilst the objectors would not be able to view the project from their residence, they were concerned with the development's impact to the scenic quality of the Wellington Valley landscape. The Department did not receive any submissions from neighbours adjacent to the project regarding visual impacts.

Visual Context

Land within the site comprises undulating hills rising to the east, and patches of remnant native vegetation located throughout largely cleared agricultural land. This includes a patch of planted native vegetation in the east of the site and patches of remnant native vegetation on the western boundary of the site, which would largely be retained.

Six non-associated residences are located within 1 km of the development footprint. The nearest non-associated residences are located approximately 110 m north (R4) and 135 m west (R2) of the development footprint, as shown in **Table 4**, and are at similar elevations to the project site. It is unlikely that other residences would experience visual impacts due to distance from the site, low height of infrastructure, topography, existing vegetation and other built infrastructure (including the Wellington Solar Farm and correctional facilities to the south and east respectively).

Table 4 | Visual Impacts at Surrounding Receivers within 1 km of site

Receiver	Distance to site boundary (m)	Distance to development footprint (m)	Unmitigated Visual Impact Rating	Mitigating Factors	Mitigated Visual Impact Rating
R1	330	412	Low	Mature native vegetation and existing infrastructure. No additional mitigation proposed.	Low
R2	135	208	High	Mature existing vegetation at the residence, with additional vegetation plantings proposed at the site boundary.	Moderate
R3	315	373	Moderate	Mature existing vegetation at the residence, with additional vegetation plantings proposed at the site boundary. Solar farm infrastructure set back from project boundary, and further mitigated by topography.	Low
R4	110	243	Moderate	Mature existing vegetation at the residence, with additional vegetation plantings proposed at the site boundary. Solar farm infrastructure set back from project boundary, and further mitigated by topography.	Low
R5	910	991	Moderate	Mature existing vegetation at the residence and roadside. No additional mitigation proposed.	Low

R6	255	286	High	Mature existing vegetation at the residence and roadside. No additional mitigation proposed.	Moderate
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The site is not visible from the town of Wellington which is located 7 km south west.

The Wellington and Macquarie correctional facilities are located opposite the south-eastern corner of the development, on Goolma Road. The Wellington substation is situated approximately 2 km south of the site. The area is largely a rural landscape but includes the correctional facilities, substation and existing electrical transmission infrastructure to the south and east.

The Mitchell Highway and Great Western Railway both run in a north-westerly direction, approximately 1 km south of the project site at their closest points. Goolma Road, a scenic road that connects the townships of Wellington and Mudgee, runs adjacent to the site's eastern boundary.

Visual mitigation

Lightsource bp has proposed the following avoidance and mitigation measures to reduce the visual impact on surrounding receivers:

- a commitment to install vegetation screen plantings six metres wide along sensitive parts of the site boundary on Goolma Road, Saxa Road and Campbells Lane, in order to screen views to the most affected residences and road users;
- a commitment to offer intermittent screen planting within or directly alongside the transmission line easement directly adjacent to the R5 zoned lots with dwellings closer than 200 m from the easement;
- co-locating power lines along the proposed transmission line, where feasible, in order to minimise the appearance of additional poles;
- using transmission poles instead of towers to minimise the visual intrusiveness of transmission infrastructure; and
- using colours and materials sympathetic to the existing environment, to minimise visual impacts.

Assessment

Landscape

The solar farm is located in an area largely surrounded by rolling hills and existing vegetation with the adjacent correctional facilities, substation and the approved Wellington Solar Farm.

Lightsource bp 's VIA notes that the two projects are largely separated by a ridgeline running east to west, which would restrict cumulative views of both projects particularly from the south. However, the two projects have a combined development footprint of approximately 1,103 ha, and would likely appear as one contiguous solar farm from many viewpoints, as opposed to two discrete developments.

The Department recognises that the introduction of the proposed solar farm to the rural landscape would result in a material change to the local landscape, but considers it would have limited regional impact, and it would not be visible from Wellington township (7 km south west of the site).

Saxa Road runs roughly parallel to the western site boundary, the Wellington North Solar Farm is set back by between 50 and 330 m from the public road and the Department acknowledges that in some areas there would be views across the two projects. Both Campbells Lane and Goolma Road run directly adjacent to the site, however impacts to motorists would also be mitigated by setbacks of up to 200 m. Lightsource bp would also implement vegetation plantings along parts of Saxa Road and Goolma Road where solar panels would occur within closest proximity to the site boundary.

Whilst Council initially requested that Lightsource bp provide landscaping around the entire perimeter of the site, the Department is satisfied with Lightsource bp's approach to target landscaping at more sensitive parts of the site's perimeter and would fragment views of the arrays. Notwithstanding, the Department has included conditions that Lightsource bp must widen the vegetation screen plantings to 10 metres and develop a Landscaping Plan for the project in consultation with Council and the most affected residential receivers.

Residences

The EIS includes a comprehensive visual impact assessment (VIA) that is based on 14 representative viewpoints, including a viewshed analysis and photomontages of key viewpoints (see **Figure 6**).

The nature of the proposed development would serve to minimise its visibility from surrounding residences, as the solar panels would be relatively low lying (up to 4 m high) and other on-site infrastructure would generally be a similar size to agricultural sheds commonly used in the area. Lightsource bp has committed to design and paint buildings to blend in with the local landscape and the Department has recommended conditions to ensure that this occurs.

The VIA identified that, with the exception of residences R2, R3, R4, and R6, the visual impacts for all residences surrounding the site is expected to be low or negligible, due to distance, topography and patches of existing vegetation.

R2 and R3 are both located on Saxa Road, 208 m and 373 m from the development footprint respectively. The Department considers that vegetation at each dwelling, the undulating nature of the landscape along Saxa Road and existing roadside vegetation and native vegetation retained on-site would reduce views of solar farm infrastructure at R2 and R3. Lightsource bp has proposed landscape screening along key sections of Saxa Road adjacent to these residences.

Residence R4 is located on Campbells Lane, approximately 243 m north of the development footprint, however views of the project infrastructure would be fragmented by existing vegetation at the residence. Solar infrastructure has been setback 130 m from the site boundary and Lightsource bp has proposed landscape screening along the section of the solar infrastructure immediately south of the residence to minimise view of the arrays.

Residence R6 is located on Goolma Road, approximately 286 m east of the development footprint. While R6 is slightly elevated from the project site, an existing stand of vegetation along Goolma Road and vegetation at the residence would significantly reduce views of solar farm infrastructure. Lightsource bp has proposed landscape screening along key sections of the solar infrastructure immediately west of the residence to minimise view of the arrays.



Figure 6 | Photomontage showing solar infrastructure from representative viewpoint for R2.

The Department has required Lightsource bp to establish and maintain a mature vegetation buffer, which must also consist of species that facilitate the best possible outcome in terms of screening views for receivers R2, R3, R4 and R6. With the proposed mitigation measures, the Department considers that the residual impacts to all nearby residences following landscaping would be low to moderate.

The proposed transmission line runs adjacent to a large lot residential subdivision on Twelve Mile Road, consisting of 13 residences. The transmission line would pass within 70 m of the nearest residence.

Lightsource bp's visual assessment considered that seven residences would experience moderate visual impacts associated with the proposed transmission line (i.e. R14, R17, R18, R19, R21 and R22).

The VIA identifies that existing topography and vegetation in the area would largely obscure the view of the proposed transmission infrastructure. Lightsource bp also proposes to use poles as opposed to lattice towers to minimise the visual intrusiveness of the proposed transmission infrastructure.

The Department notes that there is significant existing transmission infrastructure surrounding the residential subdivision, given its proximity to the Wellington substation, including an existing 132 kV transmission line which runs directly through the large lot residential subdivision, about 80 m from these residences.

In its amendment report (March 2021), Lightsource bp has committed to plant intermittent vegetation screening prior to construction within or directly alongside the transmission line easement to the rear of the residences where they are located closer than 200 m from the easement (i.e. R21 and R22). The Department considers this planting, to be prepared in consultation with the affected landowners along with the commitment to using transmission poles instead of towers to minimise the visual intrusiveness of transmission infrastructure and consideration of locations of poles would mitigate the impacts of the transmission line infrastructure. The Department has reflected the commitment to minimise the visual impacts of the transmission infrastructure and for vegetation screening adjacent to R21 and R22 in its recommended conditions.

Cumulative Visual Impacts

The Department considered potential cumulative visual impacts with the Wellington Solar Farm on three residences (R1, R2 and R3) located along Saxa Road (see **Figure 2**). The landscape plantings proposed by Lightsource bp along parts of Saxa Road where solar panels would occur within closest proximity to the site boundary which would reduce the cumulative visual impact.

Maryvale Solar Farm would be located approximately 2.5 km to the west of the project, with three receivers (R1, R2 and R3) being located within 2 km of both projects. Due to the distance to both projects, the proposed vegetation buffers and the relatively low-lying nature of the developments, the Department considers that cumulative visual impacts would not be significant.

The Department considers that the local topography and vegetation would reduce the potential for significant cumulative visual impacts to nearby residences.

Glint and Glare

While photovoltaic panels are designed to absorb rather than reflect sunlight, the Department recognises that some project components have the potential to generate glare or reflection, including the galvanised steel used for the solar panel mounting framework, but that this diminishes over time.

The setback distances from nearby residences, existing well-established intervening vegetation and the proposed vegetation screening would shield or minimise views of the development from surrounding residences, including views of infrastructure with the potential to create glare or reflection. In addition, any glint or glare experienced by nearby receivers would be temporary, depending on the time of day and receiver location.

The Department has recommended conditions requiring the applicant to minimise the off-site visual impacts of the development, including the potential for any glare or reflection, and to ensure the visual appearance of all ancillary infrastructure (including paint colours) blends in as far as possible with the surrounding landscape. Subject to the recommended conditions, the Department is satisfied that the project would not cause significant glint or glare to nearby receivers.

Siding Springs Observatory

The project is located approximately 135 km south of the Siding Spring Observatory, and therefore falls inside the Dark Sky Region covered by the NSW Government's *Dark Sky Planning Guideline*. A consent authority must consider this guideline for SSD that is likely to impact the night sky and is within 200 km of the observatory. Whilst the project would include some night security lighting, there would be negligible light spill beyond the horizontal plane. Consequently, the Department is satisfied that the project would not affect the observing conditions at the observatory.

Conclusion

To address residual visual impacts, the Department has recommended conditions requiring Lightsource bp to:

- establish and maintain a mature vegetation buffer 10 metres wide (rather than 6 metres) along sensitive parts of the site's perimeter consisting of a variety of species that would facilitate the best outcome in terms of visual screening, to minimise views of the solar farm infrastructure at sensitive receivers;
- minimise the off-site visual impacts of the development, including the potential for any glare or reflection and impacts of the transmission line poles;
- ensure the visual appearance of all ancillary infrastructure (including paint colours) blends in as far as possible with the surrounding landscape, and not mount any advertising signs or logos on site, except where this is required for identification or safety purposes;
- minimise the off-site lighting impacts of the development, and ensure that any external lighting is installed as low intensity lighting (except where required for safety or emergency purposes), does not shine above the horizontal and complies with *Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting* and the principles of the *Dark Sky Planning Guideline*; and

- prepare a detailed Landscaping Plan for the site in consultation with landholders R2, R3, R4, R6, R21 and R22, which must include a description of measures that would be implemented to ensure the effectiveness of the vegetation buffer. The plan must also include a program to monitor and report on the effectiveness of these measures.

Subject to the implementation of these measures, the Department considers that there would be no significant visual impacts on surrounding residences, and the rural character and visual quality of the area would not be adversely affected.

5.3 Other Issues

The Department’s consideration of other issues is summarised in **Table 3**.

Table 4 | Summary of other issues raised

Findings	Recommended Condition
Biodiversity	
<ul style="list-style-type: none"> • The site is largely comprised of cleared agricultural land with patches of moderate to high quality native vegetation throughout the site, along riparian corridors and along the transmission line easement. • Lightsource bp has designed the project to avoid approximately 160 ha of good to moderate quality native vegetation occurring on the site (see Figure 2). Lightsource bp has also designed the project to avoid potential habitat for threatened species within the site, such as rocky outcrops and culverts. • A section of the project’s transmission line immediately east of the substation and connection to the substation is proposed in a larger corridor to accommodate the detailed design to occur in consultation with TransGrid but Lightsource bp has considered the biodiversity values of this area and included a ‘worst case’ scenario for the transmission line easement. • The project would disturb up to 119 ha of native vegetation, including: <ul style="list-style-type: none"> – 26.5 ha of native woodland (White Box Grassy Woodland and Yellow Box Grassy Woodland); – 93 ha of grassland (White Box Grassy Woodland); and – the removal of 55 paddock trees. • Most of the native vegetation disturbed would be grasslands in poor condition, dominated by exotic species. Of the vegetation to be disturbed, only 26.5 ha (or around 20 % of native vegetation disturbance) would be of sufficient quality to require offset under the <i>Biodiversity Conservation Act 2016</i> (BC Act), comprising: <ul style="list-style-type: none"> – White Box Grassy Woodlands (15.3 ha) and – Yellow Box Grassy Woodlands (11.2 ha). • Of the native vegetation requiring offset, 8 ha is listed as <i>White Box- Yellow Box- Blakeley’s Red Gum Woodland Endangered Ecological Community</i> (the EEC) under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act). However, the EEC is fragmented and isolated, and Lightsource bp considers that it does not meet the relevant thresholds for further assessment under the EPBC Act. • Five threatened species listed under the BC Act have suitable habitat within the site. Of these species, only the Southern Myotis was observed on site during targeted observations. Seasonal conditions prevented confirmation of the remaining fauna species (Pink Tailed Legless Lizard, Glossy Black Cockatoo, Barking Owl and Masked Owl) that may utilise or exist on parts of the site, particularly along the amended transmission line easement. A 	<ul style="list-style-type: none"> • Retire the applicable biodiversity offset credits in accordance with the <i>Biodiversity Offsets Scheme</i>. • Prepare and implement a Biodiversity Management Plan in consultation with BCS, including measures to protect and manage vegetation and fauna habitat outside the approved disturbance area.

conservative approach was adopted, and it was assumed that these species were present and would be impacted.

- Two species listed under the EPBC Act were observed in the vicinity of the site during surveys (the Grey Headed Flying Fox and Eastern Bent-wing Bat). The nearest known Grey Headed Flying Fox Camp is located approximately 4 km from the development site, and the site is not considered Grey Headed Flying Fox habitat. On-site culverts represent suitable habitat for the Eastern Bent-wing Bat, however these culverts would not be impacted by the proposal. As such, no further assessment of these species is required under the EPBC Act.
- An assessment of the site considered that it does not include habitat critical to the survival of the Koala.
- The impacts on native vegetation and species would generate up to 610 ecosystem credits and 631 species credits under the BC Act. The final credit requirement would be retired in accordance with the *NSW Biodiversity Offset Scheme* which may include acquiring or retiring biodiversity credits, making payments in an offset fund or funding a biodiversity conservation action.
- With these measures, both BCS and the Department consider that the project is unlikely to result in a significant impact on the biodiversity values of the locality.

Noise

- Noise generated by the proposed construction, upgrading and decommissioning activities associated with the solar plant would be well below the 'highly noise affected' criterion of 75 dB(A) in EPA's *Interim Construction Noise Guideline* (the ICNG) at all nearby residences.
- Three non-associated receivers adjacent to the solar site (R2, R4 and R6) were predicted to experience noise levels above the 'noise affected criterion' of 45 dB(A) in the ICNG, but below the 'highly noise affected' criterion, and ranging between 46 – 51 dB(A). These exceedances would be short term (when piling installation works occur at the project boundary adjacent to these residences) and limited to standard operating hours.
- Seven residences adjacent to the proposed transmission line (R14, R17, R18, R19, R21 and R22) were predicted to experience noise levels of 50 – 63 dB(A), an exceedance up to 18 dB(A) above the 'noise affected' criterion in the ICNG.
- Actual noise impacts would likely be less than predicted, as the assessment was based on the three noisiest activities being undertaken concurrently, which is unlikely to occur.
- Given that the Wellington Solar Farm is in the final stages of construction, cumulative noise impacts arising from construction would not occur.
- The Department has recommended conditions requiring Lightsource bp to minimise noise during construction, upgrading or decommissioning by implementing best practice noise mitigation measures set out in the ICNG.
- There would be negligible noise from the solar farm during operation.
- One non-associated receiver (R14) was predicted to experience cumulative noise levels of up to 37 dB(A) during night time periods, when the noise impacts of the adjacent substation and Wellington Solar Farm were considered. This represents a 2 dB(A) exceedance of the night-time noise criterion specified in EPA's *Noise Policy for Industry* (NPfI).
- The Department notes, however, that most of the solar farm infrastructure used to model cumulative operational noise impacts would not be in use during night time periods. As such, the cumulative operational noise impacts predicted for night time periods are likely to fall well below those that have been assessed, as much of the infrastructure would not be in use. As such, it is unlikely that the project would result in an exceedance at any residence of any noise criteria set out in NPfI.
- 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.

- Nonetheless, the Department considers that a 2 dB(A) exceedance would be considered undiscernible or unnoticeable to the average person.

Traffic and Transport

- The main transport route for over-dimensional and heavy vehicles for the project is via the State road network on the Mitchell Highway and Goolma Road. A small number of heavy vehicles associated with construction of the transmission line would use Twelve Mile Road which is a local road. All roads along the transport route are designated for use by B-doubles with a maximum length of at least 19 m.
- Site access for the majority of construction and operational traffic would be via a new site access along Goolma Road, in the south-eastern corner of the site (see Figure 2).
- TfNSW did not support the use of the existing site access as the primary site access for northbound traffic travelling on Goolma Road as it did not meet the Safe Intersection Sight Distance (SISD). For this reason, TfNSW did not originally support the proposal to use the existing site access on Goolma Road as the primary site access.
- In response to concerns raised by TfNSW, Lightsource bp amended the project to relocate the existing site access approximately 40 m north from its existing location and utilise this as the main site access. The relocation of the site access would provide the necessary SISD for northbound traffic travelling at 100 km per hour, which was supported by TfNSW. The site access would be constructed to include an AUL/BAR intersection treatment.
- An additional three existing access points along Twelve Mile Road and Goolma Road would provide access for a maximum of three heavy vehicle movements and seven light vehicle movements associated with the construction of the transmission line. No upgrades to these access points would be required due to the small volume of traffic proposed.
- The main increase in traffic volumes would occur during the 24 month construction period, with a peak construction period of up to 9 months.
- During the peak period, the project would generate up to 55 heavy vehicle movements per day, 132 light vehicle movements per day and 80 shuttle bus movements per day.
- Additionally, there would be a total of two over-dimensional vehicle movements during construction, upgrading or decommissioning.
- Traffic during operations would be negligible with up to five heavy and ten light vehicle movements per day.
- The Department has recommended conditions for a Traffic Management Plan, requiring Lightsource bp to undertake dilapidation surveys and repairs of Goolma Road and Twelve Mile Road along the transport route.
- With the above upgrades, maintenance requirements and implementation of a Traffic Management Plan, the Department, TfNSW and Council are satisfied that the project would not result in significant impacts on the road network capacity, efficiency or safety.
- Undertake the relevant road upgrades prior to commencing construction.
- Restrict the number of vehicles during construction, upgrading and decommissioning to the peak volumes identified in this report.
- Ensure the length of vehicles (excluding over-dimensional vehicles) does not exceed 19 m.
- Prepare a Traffic Management Plan in consultation with TfNSW and Council, including provision for dilapidation surveys, details of the measures that would be implemented to address road safety, including consideration for school buses, other motorists and road users.

Cumulative Traffic Impacts

- The proposed transport route is also one of the haulage routes for the proposed Uungula Wind Farm, which is also proposing a haulage route along Goolma Road and Twelve Mile Road from the Mitchell Highway.
- The potential for cumulative construction traffic impacts would generally be limited to an approximately 6.5 km section of Goolma Road, between Wellington and the dedicated Wellington North Site Access, and an approximate 1.7 km section of Twelve Mile Road, between the intersection with Goolma Road and the Transmission Line Access.

- The intersection of Goolma Road and Twelve Mile Road is proposed to be upgraded for the Uungula Wind Farm, as it forms part of the primary transport route associated with that project. The Wellington North Solar Farm proposes to use this intersection during construction of the transmission line only, with a maximum of three heavy vehicles per day over a period of approximately 10 weeks.
- If the Uungula Wind Farm is approved and constructed concurrently, the cumulative peak traffic movements for both projects would peak at around 145 heavy vehicles per day and 360 light vehicles per day.
- Analysis of the cumulative traffic impacts for these projects during peak traffic periods, indicated that the projects would add a combined 240 vehicles total to existing traffic volumes along Goolma Road.
- In the event that the Wellington North Solar Farm is constructed before these road upgrades are undertaken, given the low numbers of heavy vehicles, TfNSW has not raised any concern regarding the use of the existing intersection given the low number of vehicles. If the projects are constructed concurrently, the newly constructed intersection would have sufficient capacity to support both projects.
- Any potential traffic impacts on local road users would be minimised and managed through stringent measures developed as part of the Traffic Management Plan, including scheduling construction activities and deliveries to minimise road transport movements and avoid conflict with school buses, other road users and construction traffic from other renewable energy projects in the area. TfNSW and Council support this approach, and the Department has included this requirement in the recommended conditions.

Heritage

Aboriginal Cultural Heritage

- Surveys identified nine artefact scatters, 30 isolated finds and two scarred trees. All items were assessed to be of low significance, with the exception of three items having low-moderate significance (Wellington North AFT2, AFT5 and IF17) and one of moderate significance (Wellington North AFT9).
- The development footprint has been designed with exclusion zones to avoid impacting three of the isolated finds (Wellington North IF11, IF13 and IF17) and both scarred trees.
- However, 27 isolated finds and nine artefact scatters would be directly impacted by the proposal. Lightsource bp has committed to salvage and relocate all 36 items prior to the commencement of construction.
- With these measures, the Department and Heritage NSW consider that the project is unlikely to result in significant impacts on the heritage values of the locality.

Historic Heritage

- There are no known items of historic heritage value listed on the State Heritage Register within, or in the immediate vicinity of, the project site.
- The Noonee Nyrang Homestead, listed as a heritage item with local significance under the LEP, is located in the centre of the project site.
- Site surveys identified other non-listed historical items on the site, including a European marker tree, stone trough and a culvert.
- Lightsource bp has committed to avoiding the homestead and maintaining an exclusion zone around its perimeter, however the non-listed items would all be removed.
- Heritage NSW and Council did not raise concerns regarding any impacts to the Noonee Nyrang Homestead and removal of the removal of the marker tree, stone trough and culvert.

- Salvage and relocate Aboriginal items to suitable alternative locations.
- Undertake consultation with Aboriginal stakeholders prior to construction.
- Prepare and implement a Heritage Management Plan, including a procedure for unexpected finds, in consultation with Heritage NSW, Council and Aboriginal Stakeholders.

- At the request of Heritage NSW, Lightsource bp completed a historical archaeological assessment (HAA) of the site, which recommended the development and implementation of a chance finds protocol. Heritage NSW agreed with the recommendations of the HAA and raised no further concerns.
- With these measures, the Department, Heritage NSW, and Council consider that the project would not significantly impact the heritage values of the locality.

Water and Erosion

- The site includes six watercourses, including an ephemeral fourth order stream, Wuuluman Creek. DPIE Water recommended applying 40 m setbacks from Wuuluman Creek, in accordance with *Guidelines for Controlled Activities on Waterfront Land* (NRAR, 2018). The Department has conditioned the 40 m setback from Wuuluman Creek, in accordance with DPIE Water's advice.
- Lightsource bp has designed the project to include appropriate buffer distances from all other on-site streams, and has committed to constructing all five watercourse crossings in accordance with the relevant guidelines.
- There are four farm dams within the site which would not be retained. The dams would be suitably filled with existing material from on site and would be utilised for the siting of solar panels.
- Any erosion and sedimentation risks associated with the project can be effectively managed using best practice construction techniques.
- The site is not identified as flood prone land under the Wellington LEP. The 1% AEP event was predicted to result in flatter areas of the southwest of the site acting as a floodway, with depths up to 600mm within 150 m of Wuuluman Creek. However, the proposed setbacks from watercourses on-site would minimise potential flooding impacts, and Lightsource bp has committed to constructing project infrastructure to withstand flooding impacts. This involves designing critical infrastructure, such as the on-site substation and inverters, to avoid potentially flood-affected areas of the site, and preparing a flood response plan as part of its Emergency Response Plan. These measures would also limit any potential downstream impacts from flooding events.
- The project would require around 55 megalitres (ML) of water during construction (mainly for dust suppression) and 0.15 ML of water annually during operation. A static water supply (20,000 litres) would also be established and maintained for fire protection.
- Water for the project would come either from existing onsite bores, with appropriate water access licences, and/or purchased from Council and trucked to site.
- The project would have minimal impact on groundwater sources, if on-site bores were used, and would not impact groundwater dependent ecosystems.
- Subject to the recommended conditions, the Department and DPIE Water consider that the project would not result in significant impacts on water resources.
- Minimise the siting of solar panels and ancillary infrastructure within watercourses.
- Design, construct and maintain the project to reduce impacts on surface water and flooding at the site.
- Minimise any soil erosion in accordance with *Managing Urban Stormwater: Soils and Construction* (Landcom, 2004) and ensure the project is constructed and maintained to avoid causing erosion on site.
- Unless DPIE Water agrees otherwise, ensure all works are undertaken in accordance with *Guidelines for Controlled Activities on Waterfront Land* (NRAR, 2018), including a 40 m setback from Wuuluman Creek.

Dust

- One local submission raised concern about dust impacts associated with construction of the project in the local area.
- The construction of the project involves earthworks for site preparation, trenching for cables, construction of access tracks and construction of footings for on-site infrastructure. Other sources of dust would include vehicles travelling on unsealed roads.
- Lightsource bp must minimise dust generated by the development.

- The Department is satisfied that dust generated during construction of the project would be minor and could be managed through standard mitigation measures such as use of water trucks and covering loads.
- In addition, the Department notes that it has recommended conditions requiring Lightsource bp to establish and maintain suitable perennial groundcover over the site during operation which would also minimise erosion and dust generation.
- The Department considers that, with suitable mitigation, the project would not result in any material dust impacts on neighbouring properties or the local community.

Workforce Accommodation

- Up to 400 workers would be required during the construction period.
- Lightsource bp has committed to source workers from the local community wherever possible and the Department is satisfied that there is sufficient accommodation in nearby towns, such as Wellington, Dubbo, Mudgee, Gulgong and Orange.
- There is potential for construction of the project to overlap with the construction of the approved Maryvale Solar Farm, and the proposed Suntop 2 Solar Farm, Mumbil Solar Farm, Burrendong Wind Farm and Ungula Wind Farm. Should this occur, up to 1,450 construction personnel may be required in the region. The Department considers that, although possible, it is unlikely the entire construction periods of these six projects would overlap.
- While the Department considers that there is sufficient workers accommodation for this project, to manage cumulative impacts associated with multiple projects in the region and to encourage the employment of locally sourced workers, Lightsource bp would be required to develop an Accommodation and Employment Strategy. The Strategy would require Lightsource bp to:
 - propose measures to ensure that there is sufficient accommodation for the workforce associated with the project;
 - consider the cumulative impacts with other projects in the area;
 - prioritise employment of local workers; and
 - monitor and review the effectiveness of the strategy, including regular monitoring during construction.
- Prepare an Accommodation and Employment Strategy for the project in consultation with Council, with consideration of the cumulative impacts associated with other State significant development projects in the area.

Hazards

- The majority of the site is not mapped as bushfire prone land, with the exception of a small isolated stand of remnant vegetation within the eastern portion of the site (21 ha), which would be retained.
- Lightsource bp would be required to maintain 10 m of defensible space around all project infrastructure and manage the defensible space and solar array areas as an Asset Protection Zone. Lightsource bp would also be required to comply with the RFS's *Planning for Bushfire Protection 2019* and prepare a Fire Safety Study and Emergency Plan to manage the fire risk.
- The Department and RFS are satisfied that the bushfire risks can be suitably controlled through the implementation of standard fire management procedures.
- The project would comply with the *International Commission on Non-Ionizing Radiation Protection* (ICNIRP) guidelines for electric, magnetic and electromagnetic fields.
- Ensure that the development complies with relevant asset protection requirements in the RFS's *Planning for Bushfire Protection 2019*.
- Prepare and implement an Emergency Plan in consultation with RFS and FRNSW.

Community Contributions

- Council initially requested a development contribution of 1% of the capital investment value of the project under Section 7.12 of the EP&A Act, which would equate to \$5.5 million.
- No specific conditions required.

- The Department considered the need for developer contributions in its assessment of this project and whether it would create any additional demand on public services and infrastructure.
- The assessment found that the only material additional demand on services and infrastructure related to State roads.
- As such, the Department has recommended strict conditions of consent that would require Lightsource bp to pay for all relevant road and intersection upgrades. Further, Lightsource bp would be required to pay for the repairs of any project-related impacts on the road network. These conditions have been agreed with Lightsource bp and Council and represent an investment from Lightsource bp that will benefit the local community.
- The Department also considered the demand created by the construction workforce (of up to 400 workers). As noted above, to ensure there would be sufficient existing accommodation to house construction workers, Lightsource bp would be required to develop an Accommodation and Employment Strategy in consultation with Council.
- Given the relatively low level of employment generated once it is operational (up to 4 workers), the project is unlikely to result in significant additional demand on community services and infrastructure during the operational stage of the project.
- It is noted that Council has a Section 94A Development Contributions Plan. While the Contributions Plan is a relevant matter for consideration by the consent authority, it is not binding on State significant developments. Further, as outlined above, the Department has considered the demand on public services and infrastructure and is satisfied that its recommended conditions address the only material impact of the project on these matters (i.e. roads). Consequently, the Department does not consider that a Section 7.12 levy is either necessary or warranted in this case.

Land Values

- Two local submissions raised concern that the project would have an adverse impact on neighbouring land values, particularly as a result of the project's visual impacts.
- The Department notes that:
 - property values are influenced by a number of factors;
 - there is no clear evidence to suggest that solar farms in NSW are adversely affecting property values;
 - the project is permissible with development consent under the Infrastructure SEPP;
 - a detailed assessment of the merits of the project has found that the project is unlikely to generate any significant economic, environmental or social impacts;
 - the impacts of the project can be further minimised by imposing suitable conditions on the project, and requiring a range of standard mitigation measures, such as vegetation screening; and
 - the Department considers the visual impacts of the project on the surrounding residences and road users would be minimal.
- Accordingly, the Department considers the project would not result in any significant or widespread reduction in land values in the areas surrounding the solar farm.
- No specific conditions required.

Economic Impacts

- Concerns were raised in one public submission that the project would have negligible benefits to the local community, and that there would be negligible long-term employment opportunities outside of the construction period.
- The Department notes the project would generate direct and indirect benefits to the local community, including:
 - up to 400 jobs during the 24 month construction period and up to 4 full-time jobs during operation of the project;
 - expenditure on accommodation and businesses in the local economy by workers who would reside in Dubbo Regional LGA, or adjoining LGAs;
 - the procurement of goods and services by Lightsource bp and any associated contractors;
 - upgrading of roads used by project related traffic.
- While the majority of economic benefits to the local economy would be driven by the construction of the project, the Department considers that the project would still provide some longer term economic benefits for the local community (e.g. employing operational and maintenance workers in the region) as well as long term benefits associated with delivering renewable energy for the broader community of NSW.
- Prepare an Accommodation and Employment Strategy for the project in consultation with Council, with consideration to prioritising the employment of local workers.

6. Recommended Conditions

The Department has prepared recommended conditions of consent for the project (see **Appendix H**).

The Department consulted with Lightsource bp and the relevant agencies on the conditions for the project, particularly Council and TfNSW in regard to the road upgrades and maintenance requirements, and BCS regarding the project's required biodiversity offset liability.

The conditions are required to:

- prevent, minimise and/or offset adverse impacts of the project;
- ensure standards and performance measures for acceptable environmental performance;
- ensure regular monitoring and reporting; and
- provide for the ongoing environmental management of the project.

The recommended conditions use a risk-based approach that focuses on performance-based outcomes. This reflects current government policy and the fact that solar farms require relatively limited ongoing environmental management once the project has commenced operations.

In line with this approach, the Department has recommended operating conditions to minimise traffic, biodiversity, amenity, heritage, water and bushfire impacts, and that the following management plans be prepared and implemented:

- Traffic Management Plan;
- Landscaping Plan;
- Biodiversity Management Plan;
- Heritage Management Plan; and
- Emergency Plan.

The recommended conditions also require Lightsource bp to provide detailed final layout plans to the Department prior to construction.

Other key recommended conditions include:

- *roads* - requiring relevant road upgrades to be undertaken prior to the commencement of construction;
- *biodiversity offsets* – retiring biodiversity offset credits in accordance with the *NSW Biodiversity Offsets Scheme*;
- *fire* – ensure that the development complies with the relevant asset protection requirements in the RFS's *Planning for Bushfire Protection 2019*; and
- *accommodation and employment* – requiring an accommodation and employment strategy be prepared and implemented to ensure there would be sufficient accommodation to house construction workers, and to prioritise the employment of local workers.

7. Evaluation

The Department has assessed the development application, EIS, submissions, Submissions Report, amended development application provided by Lightsource bp 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 project is located in a rural area, with the nearest non-associated residence located 110 m north of the development footprint at its closest point. A further four non-associated receivers are located within 1 km of the development footprint.

The site would have direct access to the State road network via Goolma Road and Mitchell Highway. The project would connect to the electricity network via a 5 km overhead transmission line, linking the site to TransGrid's Wellington substation.

The Department considers the site to be appropriate for a solar farm as it has good solar resources and available capacity on the existing electricity network.

The project has also been designed to largely avoid key constraints, including remnant native vegetation of good condition, local heritage sites, Aboriginal heritage items of high cultural value and watercourses. Any residual impacts would be relatively minor and managed through the recommended conditions of consent.

The project would not result in any significant reduction in the overall agricultural productivity of the region and Lightsource bp is proposing grazing sheep on the site. Additionally, 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.

Importantly, the project would assist in transitioning the electricity sector from coal and gas-fired power stations to low emissions sources. It would generate over 662,200 MWh of clean electricity annually, which is enough to power over 112,200 homes and save over 635,700 tonnes of greenhouse gas emissions per year. It is therefore consistent with the goals of the *NSW Climate Change Policy Framework* and *Net Zero Plan Stage 1: 2020 – 2030*.

The project is also located in an area that can contribute to the pilot Renewable Energy Zone in the Central West and Orana Region, as identified in the NSW Government's *Electricity Strategy*, with access to the electricity grid at a location with available network capacity.

To address the residual impacts of the project, the Department has recommended a range of detailed conditions, developed in conjunction with agencies and Council, to ensure these impacts are effectively minimised or offset. Lightsource bp has reviewed the conditions and does not object to them.

The Department considers that the project achieves an appropriate balance between maximising the efficiency of the solar resource development and minimising the potential impacts on surrounding land users and the environment. The project would also stimulate economic investment in renewable energy and provide flow-on benefits to the local community, including up to 400 construction jobs and a capital investment of approximately \$540 million.

On balance, the Department believes that the project is in the public interest and should be approved, subject to the recommended conditions of consent.

8. Recommendation

It is recommended that the Executive Director, as delegate for the Minister for Planning and Public Spaces:

- **considers** the findings and recommendations of this report; and
- **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;
- **grants consent** for the application in respect of the Wellington North Solar Farm (SSD 8895); and
- **signs** the attached development consent and recommended conditions of consent (see **Appendix F**).

Recommended by:



16.04.2021

Anthony Ko

Team Leader

Energy Assessments



16.04.2021

Nicole Brewer

Director

Energy Assessments

9. Determination

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

A handwritten signature in blue ink, appearing to read "Michael Young".

21 April 2021

Mike Young

Executive Director

Energy, Industry and Compliance

as delegate of the Minister for Planning and Public Spaces

Appendices

Appendix A – List of Documents

Wellington North Solar Farm – Environmental Impact Statement, NGH Environmental (2018).

Wellington North Solar Farm – Submissions Report, NGH Environmental (2019).

Wellington North Solar Farm – Amendment Report, NGH Environmental (2019).

Wellington North Solar Farm – Amendment Report, NGH Environmental (February, 2021).

Wellington North Solar Farm – Amendment Report, NGH Environmental (March, 2021).

Wellington North Solar Farm – Additional Information dated 15 April 2020

Wellington North Solar Farm – Additional Information dated 14 May 2020

Wellington North Solar Farm – Additional Information dated 25 February 2021

Appendix B – Environmental Impact Statement

See the Department's website at:

<https://www.planningportal.nsw.gov.au/major-projects/project/9746>

Appendix C – Additional Information

See the Department's website at:

<https://www.planningportal.nsw.gov.au/major-projects/project/9746>

Appendix D – 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; 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 of 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	<ul style="list-style-type: none"> ○ 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. ○ 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 5(c)), particularly as the project: <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; ○ can be managed such that the impacts of the project could be adequately minimised, managed, or at least compensated for, to an acceptable standard; and ○ would not fragment or alienate resource lands in the LGA; and ○ consistent with the goals of the Net Zero Plan Stage 1: 2020 - 2030, and would assist in meeting Australia’s greenhouse gas emission reduction targets. ○ The Department has considered the encouragement of ESD (Object 1.3(b)) in its assessment of the project. This assessment integrates all significant socio-economic and environmental considerations and seeks to avoid any potential serious or irreversible environmental damage, based on an assessment of risk-weighted consequences. ○ In addition, the Department considers that appropriately designed SSD solar development, in itself, is consistent with many principles of ESD. Lightsource bp has also considered the project against the principles of ESD, particularly the principle of intergenerational equity, concluding that the proposal would benefit future generations by reducing the reliance on energy sources derived from non-renewable resources, which produce greenhouse gas emissions. ○ Consideration of environmental protection (Object 1.3(e)) is provided in section 5 of this report. Lightsource bp has applied both the precautionary principle and the conservation of biological diversity and ecological integrity to avoid serious or irreversible damage to the environment where practicable and to include management measures to minimise residual impacts. Following its consideration, the Department considers that the project can be undertaken in a manner that would improve or 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. ○ Consideration of the sustainable management of built and cultural heritage (Object 1.3(f)) is provided in section 5.3 of this report. Following its consideration, the Department considers the project would not significantly impact the built or cultural heritage of the locality. The Department is satisfied that any residual impacts on heritage can be managed and/or mitigated by imposing appropriate conditions.

Aspect	Summary
State Significant Development	<ul style="list-style-type: none"> ○ Under Section 4.36 of the EP&A Act and the <i>State Environmental Planning Policy (SEPP) (State & Regional Development) 2011</i> the project is considered a State Significant Development. ○ The Minister for Planning is the consent authority for the development. However, under the Minister's delegation of 9 March 2020, the Executive Director, Energy, Industry and Compliance, may determine the project.
Environmental Planning Instruments	<ul style="list-style-type: none"> ○ The <i>Wellington Local Environment Plan 2012</i> applies and is discussed in Sections 3.2 and 5.1 of this report. ○ The project is permissible under the Infrastructure SEPP. ○ The Department has considered the provisions of SEPP (Primary Production and Rural Development) 2019. Of relevance to the project, the SEPP aims to facilitate the orderly and economic use and development of lands for primary production, to reduce land use conflict and sterilisation of rural land and to identify State significant agricultural land. While the 'important agricultural land' mapping has not been finalised by DPI Agriculture, the Department has considered potential impacts on agriculture based on current land capability mapping and other site-specific information in section 5.1 of this report. ○ The Department has considered the provisions of the SEPP (Koala Habitat Protection) 2020. However, Dubbo Regional LGA is not listed under this SEPP. ○ The Department has considered the provisions of SEPP No. 55 - Remediation of Land. A preliminary assessment of the land found no contaminated land within the project site, and the Department is satisfied the site is suitable for the development.

Appendix E - Submissions

See the Department's website at:

<https://www.planningportal.nsw.gov.au/major-projects/project/9746>

Appendix F – Submissions Report

See the Department's website at:

<https://www.planningportal.nsw.gov.au/major-projects/project/9746>

Appendix G – Amendment Report

See the Department's website at:

<https://www.planningportal.nsw.gov.au/major-projects/project/9746>

Appendix H – Recommended Conditions of Consent

See the Department's website at:

<https://www.planningportal.nsw.gov.au/major-projects/project/9746>