



Quorn Park Solar Farm

State Significant Development Assessment

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Executive Summary

Quorn Park Solar Farm Pty Ltd (QPSF), a subsidiary of Renewable Energy Developments, proposes to develop a new 80 megawatt (MW) solar farm with 20 MW / 20 MW-hours of battery storage located approximately 8 kilometres (km) north west of Parkes in the Central West and Orana region of NSW.

The project is located in close proximity to the regional road network via Henry Parkes Way and would connect to the electricity network via Essential Energy's 132 kV transmission line, 700 m south west of the site. The site is located in a rural area, with three residences located within 1 km of the site.

Engagement

The Department exhibited the Environmental Impact Statement (EIS) for the project and received 41 public submissions (40 objecting and one providing comments). Advice was also received from 11 government agencies, including Parkes Shire Council.

The Department also consulted with Council and the relevant government agencies on key issues and inspected the site and met with surrounding landowners on 26 February 2020.

Council supports the project, and none of the agencies object to the project, subject to the implementation of appropriate mitigation and management measures.

In response to agency advice and submissions on the project, QPSF amended the project. The project amendments have led to better outcomes by avoiding impacts on agricultural land and watercourses and minimising visual impacts on surrounding residences by increasing setback distances.

Assessment

The Department has undertaken a comprehensive assessment of the merits of the project and identified the key assessment issues as visual amenity, land use compatibility and traffic impacts.

The project site is 470 hectares (ha) and is currently used for agricultural purposes, including grazing and dryland cropping. The development footprint (343 ha) is primarily located on soils classified as Class 3 under the *Land and Soil Capability Mapping in NSW* (OEH, 2017), including soils identified as Biophysical Strategic Agricultural Land (BSAL) within the site, meaning that approximately 200 ha of BSAL would be impacted.

The Department considers that the project would not significantly reduce the overall agricultural productivity of the region and that the inherent agricultural capability of the site would not be affected, and is satisfied that the site could be returned to its full agricultural uses in the future following rehabilitation. Approximately 27 % of the site would remain available for agricultural production, and the Department has recommended conditions requiring the implementation of land management measures to maintain the full agricultural capability of soils across the entire site during the operation of the project. Importantly, both Parkes Shire Council and Department of Primary Industries – Agriculture support the project, subject to the recommended conditions.

Views from surrounding residences and roads would be screened by topography, existing vegetation, and minimised by distance from the site. The Department supports QPSF's amended layout, which has removed the substation from the far southwest corner of the site, provided increased development setbacks from the site boundaries, reduced the overall development footprint by 57 ha and provided additional vegetation screening along sections of the northern and western boundaries of the site. As a further visual mitigation measure, the Department has recommended conditions requiring the

implementation of additional vegetation screening along the northern and western boundaries of the onsite substation to minimise views of the development from receiver R2.

The potential traffic impacts would be relatively short-term, minor in nature and can be managed in accordance with Government policy. The site access routes and road upgrades have been designed in consultation with Council and Transport for New South Wales (TfNSW). The Department has recommended strict conditions requiring road upgrades and a comprehensive Traffic Management Plan.

There are three existing mineral exploration licences (ELs) that exist over the site. While the ability to access the underlying mineral resources may be locally constrained during the operation of the solar farm, Regional NSW – Mining, Exploration & Geoscience considers that these resources would not be sterilised in the long term following decommissioning and rehabilitation of the project.

The project would employ up to 130 workers during the nine-month construction period. The Department is satisfied that there is sufficient accommodation within Parkes and nearby towns, such as Forbes, to accommodate the project related workforce, and that the use of this accommodation would stimulate the economy. There would be minimal localised cumulative impacts, including visual and traffic impacts, and the Department has recommended strict conditions to minimise the potential cumulative traffic impacts of the proposal with other solar farms in the area, particularly Parkes Solar Farm (operational) and Goonumbla Solar Farm (due to be operational in August 2020).

To address the residual impacts of the project, including Aboriginal cultural heritage, historic heritage, water, noise and hazards, the Department has recommended a range of stringent conditions, developed in conjunction with agencies and Council, to ensure these impacts are effectively minimised or offset to meet acceptable standards.

Summary

Overall, 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 and is consistent with the NSW Government's *Large-Scale Solar Energy Guideline*.

The project is also consistent with the NSW's *Climate Change Policy Framework* and *NSW Net Zero Plan Stage 1: 2020 – 2030*, as it would contribute 80 MW of renewable energy to the National Electricity Market, including a battery storage facility with a capacity of 20 MW / 20 MWh. Importantly, the battery facility would enable the project to store solar energy for dispatch to the grid outside of daylight hours and/or during periods of peak demand, which has the potential to increase grid stability and energy security.

The project would also provide flow-on benefits to the local community, including up to 130 construction jobs and a capital investment of \$88.7 million.

The Department considers that the project would result in benefits to the State of NSW and the local community and is therefore in the public interest.

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1. Project

Quorn Park Solar Farm Pty Ltd (QPSF), a subsidiary of Renewable Energy Developments, proposes to develop a new State significant development solar farm approximately 8 kilometres (km) northwest of Parkes in the Parkes Shire local government area (LGA) (see **Figures 1 and 2**).

The project involves the construction of a new solar farm with a generating capacity of 80 megawatts (MW) and 20 MW / 20 MW hour (MWh) of battery storage. 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 increase.

The solar farm would provide a direct connection to Essential Energy's existing 132 kilovolt (kV) transmission line located approximately 700 m southwest of the development site.

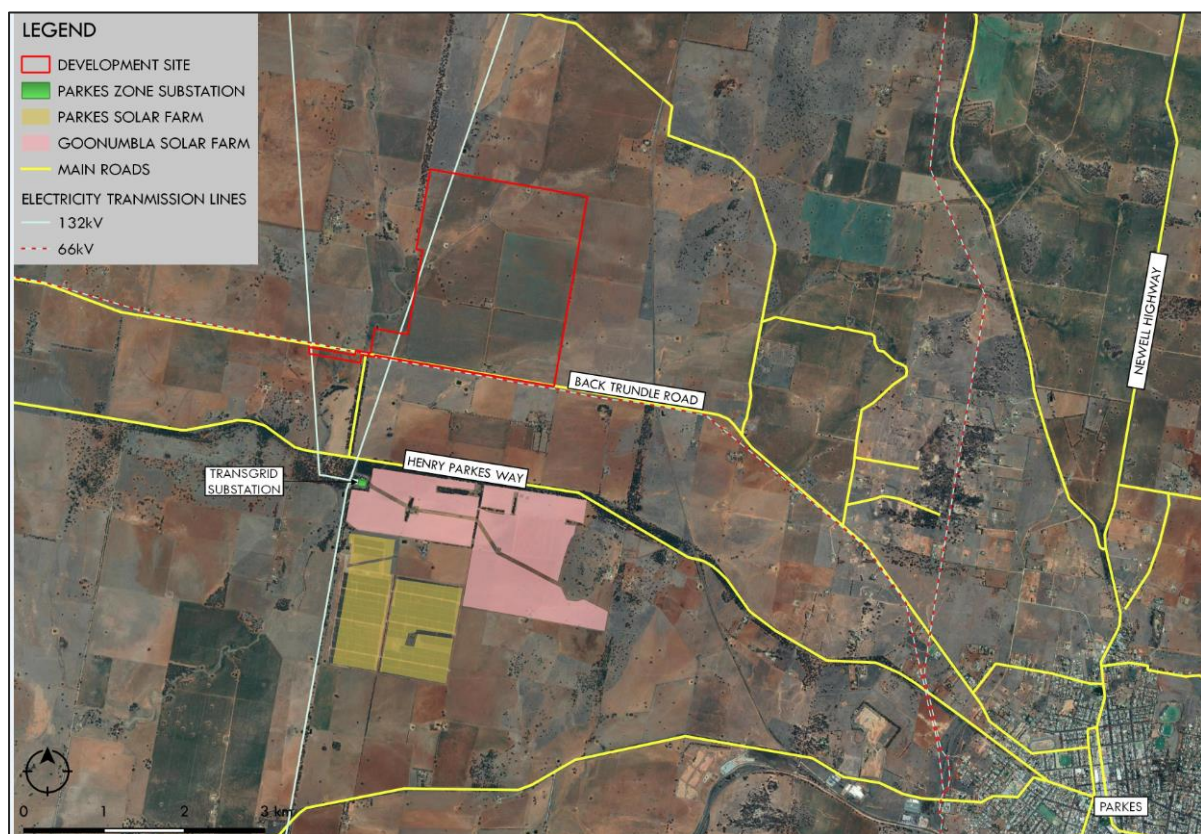


Figure 1 | Regional Context Map



Figure 2 | Project Site

The key components of the project are summarised in **Table 1**, depicted in **Figure 3**, and described in detail in the Environmental Impact Statement (EIS) (see **Appendix B**), Submissions Report (see **Appendix D**) and additional information provided during the Department's assessment of the project (see **Appendix F**).

Table 1 | Main Components of the Project

Aspect	Description
Project summary	<p>The project includes:</p> <ul style="list-style-type: none"> • approximately 250,000 panels (up to 4 m high, fixed tilt or single-axis tracking) and 19 inverter stations (up to 2.5 m high); • an on-site substation (including supporting structures for overhead cabling up to 14 m high); • a new double circuit 132 kV transmission line to connect with Essential Energy's 132 kV transmission line approximately 700 m south west of the site; • an energy storage system (20 MW / 20 MWh); • an operations and maintenance shed (7 m high); • a control room building (4.5 m high); • perimeter fencing (2.4 m high); • internal access tracks, staff amenities, site offices, laydown areas, car parking and security fencing (2.4 m high); and • minor protection equipment and communications in TransGrid's Parkes Zone substation.
Project area	<ul style="list-style-type: none"> • Site: 470 ha • Development footprint: 343 ha
Access route	<ul style="list-style-type: none"> • All vehicles would access the project site and easement property via Henry Parkes Way, McGrath Lane and Back Trundle Road.
Site entry and road upgrades	<ul style="list-style-type: none"> • Site entry on Back Trundle Road to be upgraded with a rural property access type treatment. • Upgrades to the intersection of Henry Parkes Way and McGraths Lane to provide a Basic Right Turn (BAR) and a Basic Left Turn (BAL) intersection treatment. • Widening and bitumen seal of McGrath Lane for at least a distance of 100 m from Henry Parkes Way and Back Trundle Road.

Aspect	Description
	<ul style="list-style-type: none"> • Construction of rural sealed intersection to Back Trundle Road and McGrath Lane. • Widening and bitumen seal of Back Trundle Road for at least a distance of 100 m from McGrath Lane.
Construction	<ul style="list-style-type: none"> • The construction period would take approximately 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 is approximately 30 years. However, the project may involve infrastructure upgrades that extend the life of the project.
Hours of Operation	<ul style="list-style-type: none"> • Daily operations and maintenance would be undertaken Monday to Saturday 7 am to 6 pm, and 8 am to 6 pm on Sundays and Public Holidays.
Employment	<ul style="list-style-type: none"> • Up to 130 construction jobs and 3 full-time operational jobs
Capital Investment Value	<ul style="list-style-type: none"> • \$88.7 million

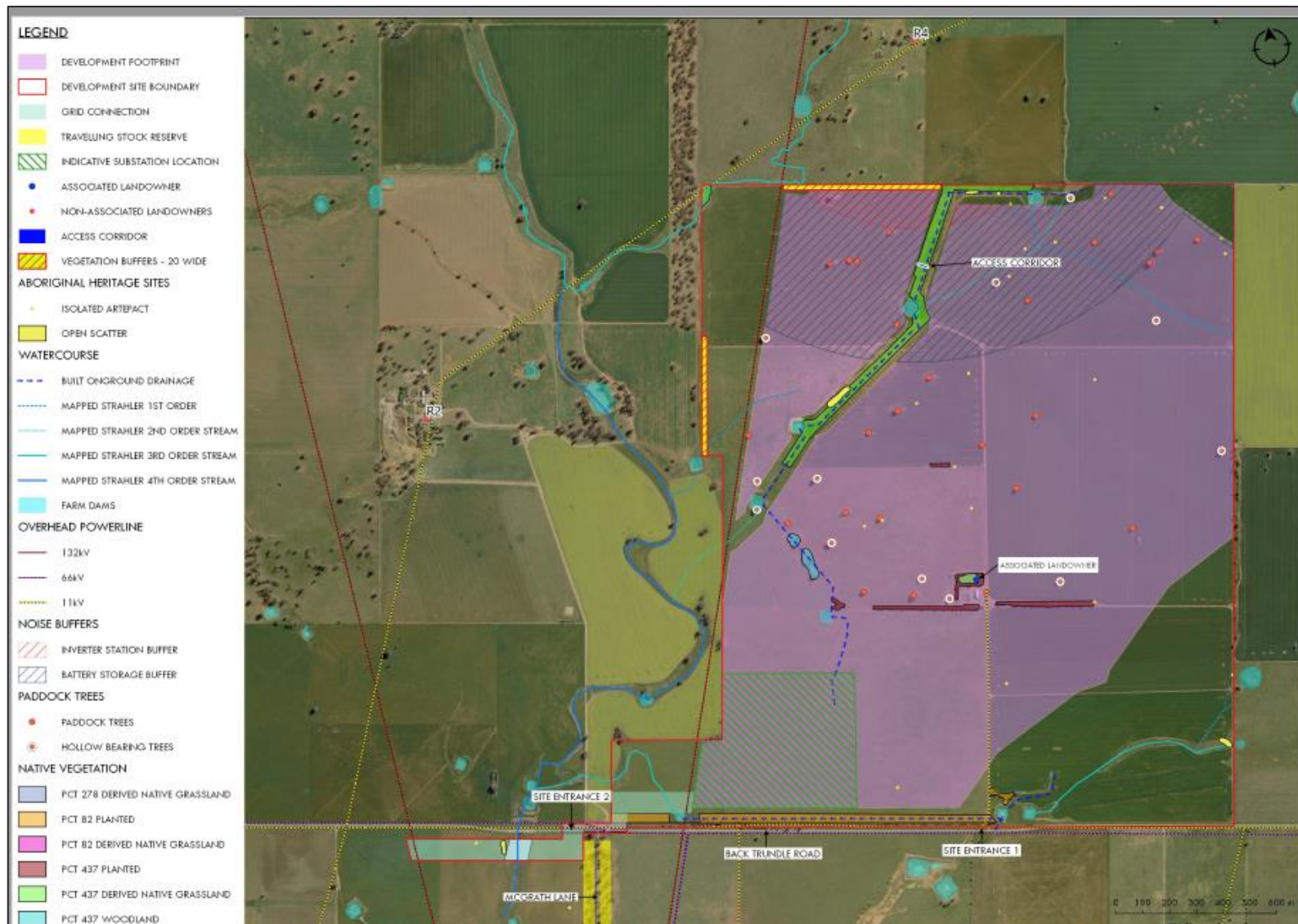


Figure 3 | Project Layout

2. Strategic context

2.1 Site and Surrounds

The project is located on a 470 hectare (ha) site in the Central West and Orana region of NSW. The site is zoned RU1 – Primary Production under the *Parkes Local Environment Plan 2012* (Parkes LEP) and is currently used for agricultural purposes, including grazing of livestock and dryland cropping such as barley and canola.

The proposed development footprint is 343 ha and has been designed to largely avoid site constraints, including Biophysical Strategic Agricultural Land (BSAL) as far as practicable, watercourses, Aboriginal heritage items, the 132 kV transmission line easement, as well as nearby residences (see **Figure 3**).

Soil studies undertaken as part of the EIS indicate that soils within the site are primarily classified as Class 3 under the *Land and Soil Capability Classification in NSW* (OEH, 2017) meaning that the land is suited to grazing, but capable of sustaining cultivation on a rotational basis, and that 60 % of the site (i.e. approximately 282 ha) is BSAL.

The site comprises low lying and relatively flat land and is predominantly cleared of vegetation. The site lies within the Lachlan River catchment area, with several watercourses traversing the site. However, due to the long-term agricultural use of the site, the land within the site is highly disturbed, and watercourses within the site have been extensively modified through drainage modification works.

Back Trundle Road runs along the southern boundary of the proposal, with Henry Parkes Way located approximately 2 km to the south of the site at its nearest point. Land immediately surrounding the site is also zoned RU1 and is predominantly used for agricultural purposes, including grazing and dryland cropping.

There are twelve non-associated residences within approximately 2 km of the project site, including eight of which objected to the project, with the closest residences located approximately 540 m north (R4), approximately 750 m southeast (R11) and approximately 900 m south (R8) of the site, although R11 and R8 are 1.2 km from the amended development footprint. These residences would have minimal views of the proposed development. The nine other residences are located between 1 km and 2.3 km from the site, with distance, vegetation and topography limiting views of the project site. R2 (1.2 km from the development footprint) is at a slight elevation with views over the south western portion of the site.

The Australian Rail Track Corporation (ARTC) Inland Rail transport hub is located approximately 2 km to the northeast of the site. Construction works for the Inland Rail transport hub are currently underway. Parkes Special Activation Precinct is also located approximately 5 km to the southeast of the site.

An Essential Energy 132 kV transmission line is located approximately 700 m southwest of the site. The solar farm would connect to the transmission line via an easement across the northern boundary of adjoining land (R1).

2.2 Other Solar Farms

The Central West and Orana region of NSW has attracted considerable interest from solar developers given the presence of major transmission lines and existing electricity substations in the area. There are a total of five approved or proposed State significant development solar projects within approximately 100 km of the project, with the closest located within 3 km south of the site, being Goonumbla Solar Farm and Parkes Solar Farm (see **Table 2** and **Figure 4**).

Table 2 | Nearby Solar Farms

Project	Capacity (MW)	Status	Approximate distance from the project (km)
Goonumbla Solar Farm	70	Due to be operational in August 2020	2
Parkes Solar Farm	65	Operational	3
Darobalgie Solar Farm	100	Proposed	41
Jemalong Solar Farm	50	Construction	75
Manildra Solar Farm	50	Operational	66

Potential cumulative impacts relate to loss of agricultural land, traffic, workforce accommodation and visual amenity. Darobalgie Solar Farm is at a preliminary stage with no application yet submitted to the Department, construction works at Goonumbla Solar Farm were completed in May 2020 (with operations due to commence in August 2020), and Manildra Solar Farm and Parkes Solar Farm are both operational.

There is the potential for the construction period of the project to overlap with that of Jemalong Solar Farm, which is currently under construction. However, there would be no significant cumulative visual, noise or traffic impacts associated with an overlap of construction periods between Jemalong Solar Farm and the project given the distance between Jemalong Solar Farm and the project site.

The project is proposing to use State network routes for heavy and light vehicles. Henry Parkes Way would not experience significant cumulative traffic impacts and has sufficient capacity to absorb construction traffic of the project. In addition, the Department has recommended strict conditions to minimise any potential cumulative traffic impacts with other nearby solar farms in the area, namely Goonumbla Solar Farm and Parkes Solar Farm. Potential cumulative traffic impacts from the project have been considered in **section 5.3**.

Potential cumulative visual impacts from the project have been considered in **section 5.1**. Workforce accommodation for the project would be sourced from the local and wider region, including neighbouring towns and LGAs, as discussed further in **section 5.4**.

The broader potential cumulative impacts on agricultural land in the region are discussed further in **section 5.2**.

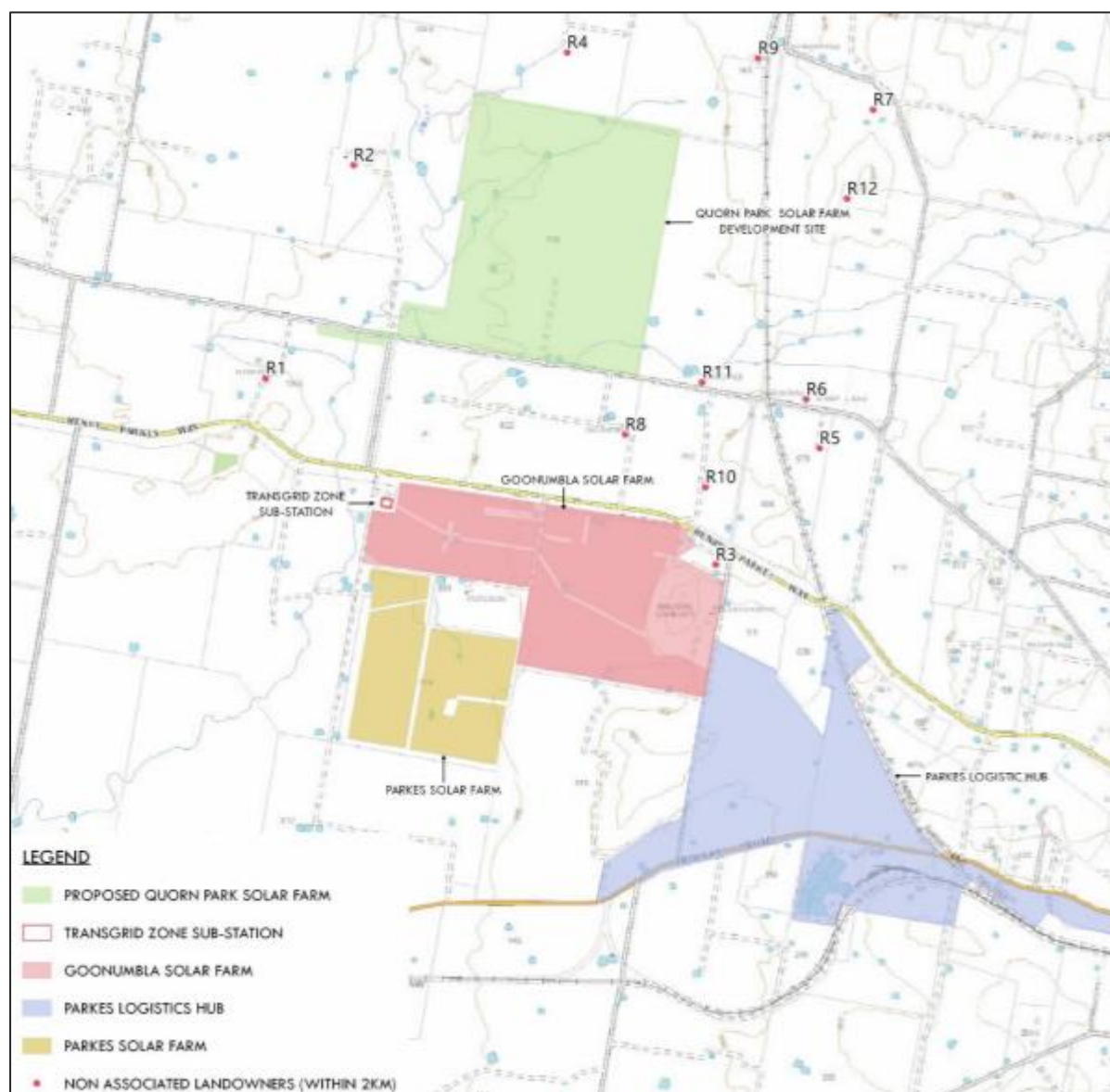


Figure 4 | Residential Receivers and Nearby Solar Farms

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 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. The *NSW 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. Quorn Park Solar Farm submitted its EIS in October 2019, and its assessment is consistent with the principles of the Guideline.

The Guideline also acknowledges that large scale solar projects could help to 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 11 major operational projects and an additional nine under construction.

In March 2018, the NSW Government identified 10 potential Energy Zones across three broad regional areas, including the New England, Central West and South West regions of NSW. While the project is not located within a Renewable Energy Zone, the NSW Government has a clear policy to encourage investment in new electricity infrastructure and unlock additional generation capacity in order to ensure secure and reliable energy in NSW, subject to appropriate site selection, detailed assessment and community consultation.

The project would have access to the electrical grid at a location with available network capacity. With a capacity of 80 MW, the project would generate enough electricity to power about 30,000 homes, and is therefore consistent with NSW's *Climate Change Policy Framework* and *Net Zero Plan Stage 1: 2020 – 2030*.

3. Statutory Context

3.1 State Significant Development

The project is classified as State significant development under Section 4.36 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). This is because it triggers the criteria in Clause 20 of Schedule 1 of *State Environmental Planning Policy (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 and Resource Assessments, may determine the development application as Council did not object, there were less than fifty unique submissions from the general public and a political donations disclosure statement has not been made.

3.2 Amended Application

In accordance with Clause 55 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulations), a development application can be amended at any time before the application is determined.

QPSF has sought to amend its application to move the substation from the far southwest corner of the site, provide increased development setbacks from the site boundaries, reduce the overall development footprint by 57 ha and provide landscape buffers along part of the northern boundary of the site and part of the western boundary of the site. The project amendments also include an increased height of the control room building to 4.5 m as well as a separate operations and maintenance shed that would be up to 7 m in height. These structures would both be located within the indicative substation location area at the southwest corner of the site.

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

- the project amendments have reduced the impacts of the project as a whole;
- the amended application directly responds to the key issues raised in submissions received by the Department during the exhibition of the original application;
- QPSF has assessed the impacts of the amended project (see **Appendices E and F**);
- the Department made the additional information available online; and
- matters raised by the community regarding the amended application have been considered by the Department, and the Department is satisfied that these concerns could be addressed with appropriate recommended conditions of consent.

The project amendments are summarised in **section 4.7** of this report.

3.3 Permissibility

The site is located wholly within land zoned RU1 Primary Production under the Parkes LEP, the provisions of which are discussed in **section 5.2**. The RU1 zone includes various land uses that are both permitted with and without consent. As a solar farm is 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 is a prescribed rural zone pursuant to the Infrastructure SEPP. Consequently, the project is permissible with development consent.

3.4 Integrated and Other Approvals

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

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

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

3.5 Mandatory Matters for Consideration

Section 4.15 of the EP&A Act outlines the matters that a consent authority must take into consideration when determining development applications. 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 QPSF's consideration of environmental planning instruments in its EIS, as summarised in **section 5** of this report. The Department has also considered relevant provisions of the environmental planning instruments in **Appendix G**.

4. Engagement

4.1 Department's Engagement

The Department publicly exhibited the EIS from 5 November 2019 until 3 December 2019 and advertised the exhibition in the *Parkes Champion Post* and *Forbes Advocate*, and notified adjoining landowners adjacent to the project boundary.

The Department also consulted with Council and the relevant government agencies throughout the assessment. The Department also inspected the site and met with Council on 26 February 2020 and visited surrounding landowners to further understand their concerns.

The Department notified and sought comment from Essential Energy, TransGrid and Transport for NSW (TfNSW) in accordance with the Infrastructure SEPP, as discussed further in **section 4.4** of the report.

4.2 QPSF's Engagement

QPSF 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. QPSF also undertook consultation with the Department, relevant government agencies and electricity network providers during the assessment process.

4.3 Submissions and Submissions Report

During the exhibition of the EIS, the Department received 41 public submissions, consisting of 40 objections (including a petition with 62 signatures) and one comment.

Three of the public submissions received were duplicates or were substantially the same as other submissions. Therefore, a total of 38 unique submissions were received.

In addition to the public submissions, one special interest group provided comments after the exhibition period ended (the holders of an exploration licence (EL8943) that applies to the site).

Advice was also received from 11 government agencies, including Parkes Shire Council.

Full copies of the agency advice, public submissions and special interest group comment are attached in **Appendix C**.

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

4.4 Key Issues – Government Agencies

Parkes Shire Council supports the project, but raised concerns and made recommendations relating to the visual impacts of the development on surrounding agricultural properties; bush fire; weeds and

waste management; environmental management; access and traffic; impacts on the agricultural viability of the land; and stormwater management. Council also recommended a suite of local road upgrade requirements and required QPSF to undertake ongoing consultation regarding sources of water for the project.

QPSF has addressed Council's comments in the Submissions Report and additional information. The Department has recommended a range of conditions of consent to address Council's concerns, which are discussed further in **section 5**. Council has advised that it has no residual concerns subject to the recommended conditions of consent.

The **Department's Water Group** requested confirmation that Parkes Shire Council has provided agreement to QPSF regarding water access and water supply for the project and requested details of the water requirements for the project. The Water Group has also provided recommendations regarding matters relating to water licences and watercourse crossings. QPSF has addressed these matters in the Submissions Report. The Department has recommended conditions to address the matters raised by the Water Group, which are discussed in **section 5**.

The **Department of Primary Industries (DPI) – Agriculture** recommended that all below ground infrastructure and underground cabling be removed to ensure the land can be returned to its full agricultural production potential following decommissioning and rehabilitation of the project. DPI – Agriculture also recommended that the proposed development be built around the agricultural use of the site so that this use can continue through the life of the project. QPSF has addressed these matters in the Submissions Report, and DPI - Agriculture has advised that they have no residual concerns, subject to appropriate conditions of consent. The Department has recommended conditions of consent to address these issues, which are discussed further in **section 5**.

The **Department's Biodiversity Conservation Division (BCD)** (formerly the Office of Environment and Heritage) initially raised concerns that the Biodiversity Development Assessment Report (BDAR) was not prepared in accordance with the relevant requirements of the *Biodiversity Conservation Act 2016* (BC Act).

BCD also provided recommendations regarding mitigation measures to reduce the chance of weed spread and recommendations for the development of an Aboriginal Heritage Management Plan (AHMP) in consultation with Registered Aboriginal Parties (RAPs). QPSF has addressed these comments in the Submissions Report and provided certification that the BDAR was undertaken in accordance with the relevant provisions of the BC Act. The Department has recommended conditions of consent to address these issues, which are discussed in **section 5**. BCD has confirmed that it has no residual concerns, subject to the recommended conditions.

Regional NSW – Mining, Exploration & Geoscience (MEG) (formerly known as DRG) requested confirmation that QPSF has undertaken adequate consultation with the titleholders of EL7676 and EL5323. QPSF has addressed these concerns in the Submissions Report and subsequent information, and MEG has confirmed that it is satisfied with the consultation undertaken.

MEG has also advised that a recently approved Exploration Licence (EL8943, which was granted on 18 February 2020) coincides with the development site, though the site forms only a small part of the overall exploratory area under EL8943, and it is satisfied that the proposed development would not sterilise any mineral resources.

Transport for NSW (TfNSW) requested clarification regarding the proposed haulage routes, haulage sources and haulage volumes, as well as details of the proposed measures to manage potential road and traffic impacts on the locality. TfNSW also recommended conditions to manage potential traffic impacts, including road upgrades and the preparation of a Traffic Management Plan in consultation with relevant authorities and stakeholders. QPSF has addressed these matters in the Submissions Report and additional information, and TfNSW has advised that they have no residual concerns with the proposed development, subject to the recommended conditions of consent. These matters are discussed further in **section 5.3**.

The **Environmental Protection Authority** (EPA) provided recommendations that QPSF consult with Council regarding sourcing of water for the project and that construction associated with the proposed development be undertaken within standard construction hours.

QPSF has addressed these concerns in the Submissions Report, and the Department has recommended conditions of consent to address these matters, which are discussed further in **section 5**. The EPA has advised that it has no residual concerns regarding the proposed development.

TransGrid provided comments indicating that a Connection Process Agreement with QPSF would be required for the connection to TransGrid's network. QPSF addressed these comments in the Submissions Report. TransGrid has advised that it has no residual concerns with QPSF connecting into their network, subject to their requirement that any proposed connection to TransGrid's infrastructure addresses TransGrid's Easement Guidelines and safety criteria.

Essential Energy advised that there is adequate capacity within its network to accommodate the proposed development and raised no concerns regarding the proposed development.

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

The **Heritage Council of NSW** and the **Department's Crown Lands** raised no concerns about the project and made no recommendations.

4.5 Community Submissions

Of the 41 submissions received from the public, 40 objected (including a petition with 62 signatures) and 1 provided comment on the project. A summary of all submissions from the public is provided in **Table 3**.

Of these submissions, three were duplicate submissions or were substantially the same as other submissions. Therefore, of these 41 submissions, only 38 were unique.

Of the 41 submissions, 78 % (32) were received from residents located within 10 km of the site, 12 % (5) were received from residents between 10 km and 50 km from the site and 10% (4) were from residents located more than 50 km away or from undefined locations.

Table 3 | Summary of Community Public Submissions

Submitters	Object	Support	Comment	Total
< 5 km	22	0	1	23
5 – 10 km	9	0	0	9
10 – 50 km	5	0	0	5
> 50 km	2	0	0	2
Undefined	2	0	0	2
TOTAL	40	0	1	41

The key issues raised in the public submissions are summarised in **Figure 5**. The most common matters raised in submissions objecting to or commenting on the project include the following:

- visual impacts on the surrounding landscape and residences (85% of objections and comments);
- land use compatibility, including loss of prime agricultural land and reduced agricultural output in the Parkes region (76% of objections and comments);
- property devaluation (63% of objections and comments); and
- water and flooding, including site runoff and water availability (46% of objections and comments).

Other issues raised relate to economic impacts, including impacts on local businesses, cumulative impacts of several solar farms within the locality, including increased traffic and noise, potential hazard / bushfire threat, noise impacts; impacts on surrounding agricultural activities, and inadequate consultation.

Both the Department and QPSF have undertaken consultation with the community including visiting the site and meeting with surrounding landowners.

Section 5 of the assessment report provides a summary of the Department's consideration of the key issues raised by the public and recommended conditions.

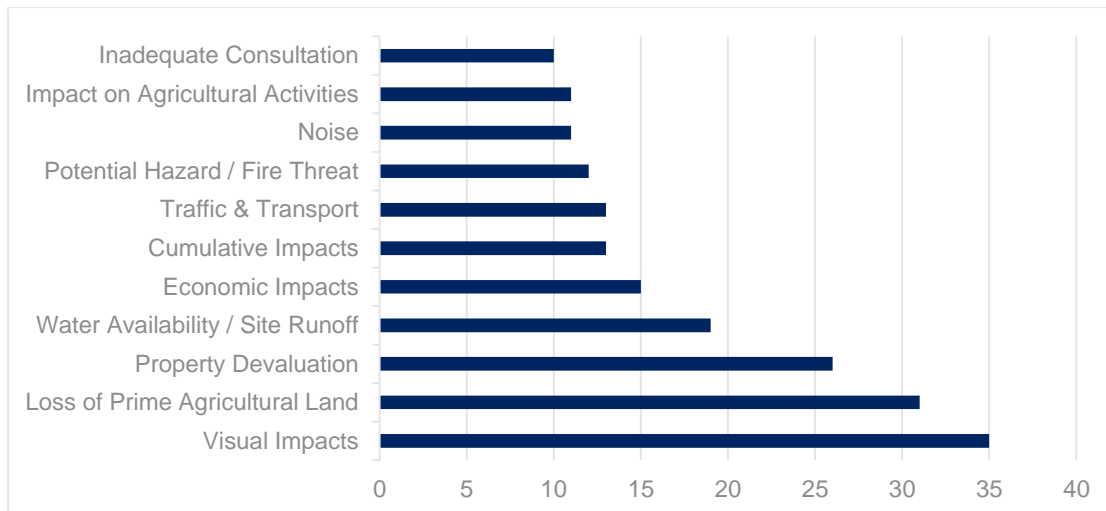


Figure 5 | Key Issues Raised in Public Submissions

4.6 Special Interest Group

Omya Australia Pty Ltd (Omya) provided comment that was received after the exhibition period. Omya raised concerns that the proposed development may restrict their access to high quality limestone deposits associated with exploration licence application ELA5870, which overlies and surrounds the site. QPSF responded to this in subsequent correspondence provided to the Department, and the Department has considered this matter in **section 5.2**.

Subsequent to the Department's receipt of this comment, MEG approved Omya Australia Pty Ltd's ELA5870 on 18 February 2020 (EL8943).

As noted in **section 4.4**, MEG has indicated that the development footprint for the proposed development covers only a small portion of the exploratory area under EL8943, and MEG do not consider that the proposed development would sterilise any mineral resources.

4.7 Amended Application

Following consideration of concerns raised in submissions, QPSF provided an amended site layout. Under the amended layout, the substation was removed from the far southwest corner of the site. The proposed amendments are detailed in the Submissions Report and Amendment Letter provided by QPSF.

Subsequent to these amendments, the Department requested that QPSF provide further details and consider further mitigation measures to address potential visual impacts on nearby receivers as well as potential impacts associated with site and surface water runoff.

In response to this, QPSF further refined the proposed project layout to move the substation further from the southwest corner of the site and increase the setbacks between the development footprint and neighbouring residences, reducing the overall development footprint by 57 ha.

Subsequent to these amendments, the Department requested that QPSF provide further details and consider further visual mitigation measures for nearby receivers and include further details regarding site access points for the transmission line, road upgrades and road alignments, and a biodiversity assessment of all road upgrades not previously considered in the application.

In response to this, QPSF further refined the site layout to include 20 m wide vegetation screening along sections of the northern and western boundaries of the site to mitigate visual impacts on R4 and R2, including a 540 m long vegetation screen buffer at the western end of the northern boundary facing receiver R4 and a 490 m long vegetation screen buffer on the northern end of the western boundary facing receiver R2.

Further amendments also include an increased height of the control room building to 4.5 m (a 1.8 m increase in height from the original height) as well as a separate operations and maintenance shed that would be up to 7 m in height. Both of these structures would be located within the substation area located in the southwest corner of the site. The proposed amendments are detailed in the additional information and Amendment Report provided by QPSF (refer to **Figure 3**).

5. Assessment

The Department has undertaken a comprehensive assessment of the merits of the project. This report provides a detailed discussion of the key assessment issues, namely visual amenity (see **section 5.1**), land use compatibility (see **section 5.2**) and traffic and transport (see **section 5.3**).

The key constraints for the project are depicted 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 in **section 5.4**. A list of the key documents that informed the Department's assessment is provided in **Appendix A**.

5.1 Visual

The majority of the community submissions objecting to the project (85 %) raised concerns about the potential visual impacts of the proposed development, including potential impacts on the scenic quality, landscape and rural outlook of the area and cumulative impacts of several solar farms within the locality. Some submissions (20 %) raised concerns regarding the potential visual impacts associated with glare and lighting from the solar farm.

Visual Context

The site and surrounds are located within an undulating rural landscape predominantly characterised by agricultural uses, including several farms and residences surrounding the site. The site has a gentle gradient of approximately 20 m (<1 %), with a high point of 293 m AHD at the northeast corner and a low point of 275 m AHD at the southwest corner of the site adjacent to Back Trundle Road. A low ridgeline is located to the north and northeast approximately 1 km from the site, and other ridgelines and rolling hills are located to the southeast and southwest approximately 2 km from the site. Due to the topography of the surrounding landscape, the site is located at a slightly lower elevation than many surrounding properties.

While there is some existing remnant vegetation scattered throughout the site and along a portion of the southern and western site boundaries, the site is largely cleared of vegetation due to the long-term agricultural use of the site.

The closest non-associated residence (R4) is located approximately 540 m north of the development footprint at its closest point. Eleven other residences are located between approximately 1 km and 2 km from the development footprint (see **Figure 7**).

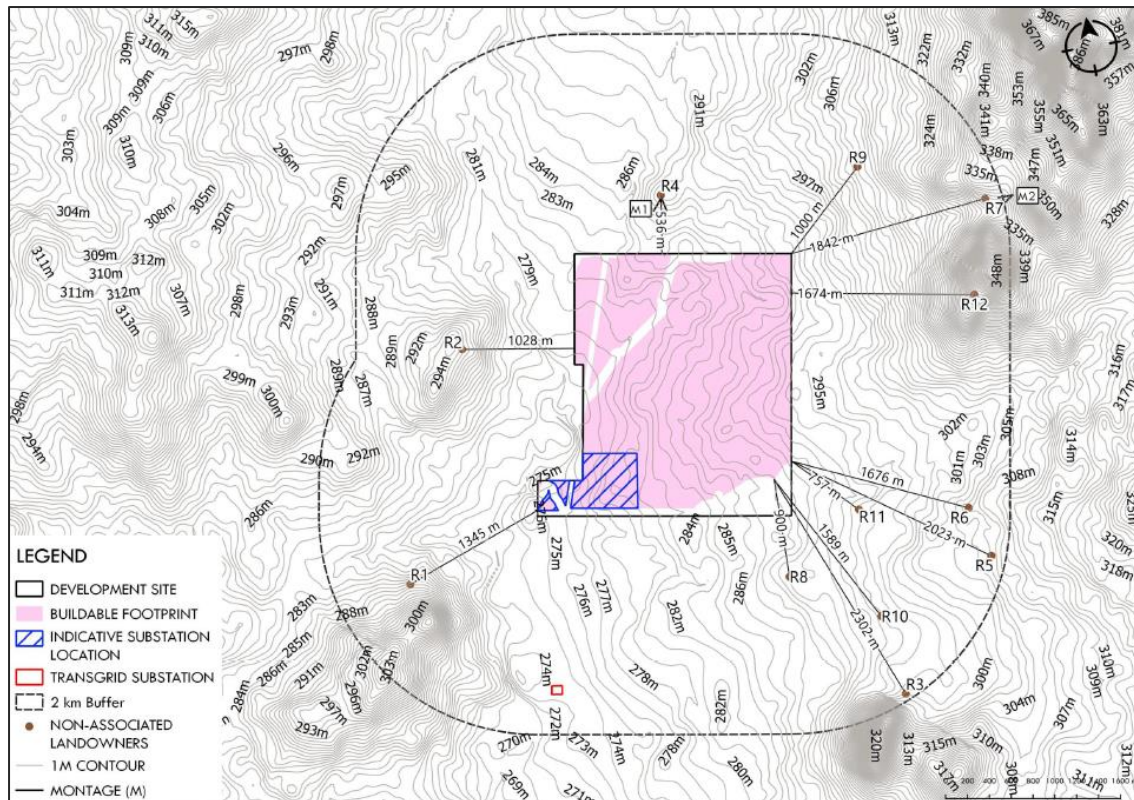


Figure 6 | Original Development Footprint and Nearby Receivers

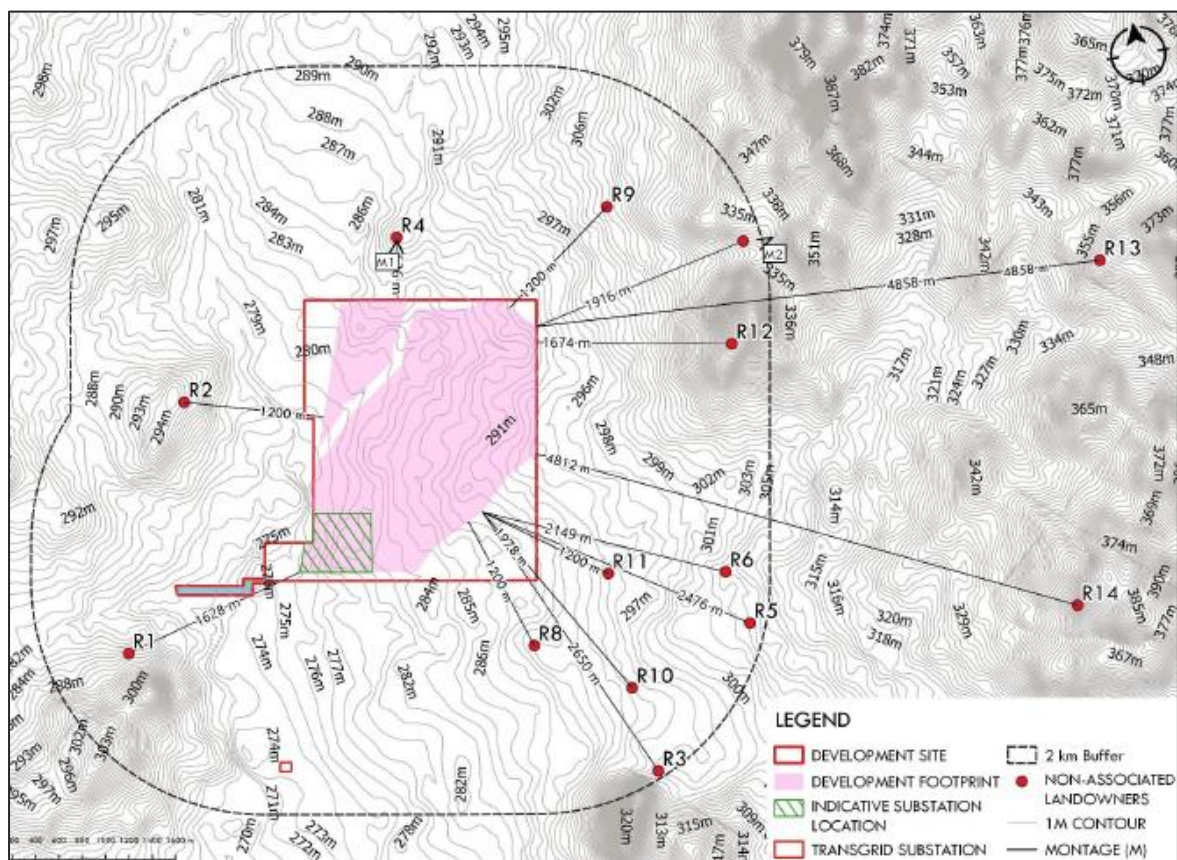


Figure 7 | Amended Development Footprint and Nearby Receivers

Visual Mitigation

In response to the concerns raised by surrounding residents regarding potential visual impacts, QPSF provided an amended site layout (see **Figure 3** and **Figure 7**).

The amended layout includes increased setbacks between the development footprint and nearby residents compared with the original layout (see **Figure 6**).

This includes:

- removal of all infrastructure to the west of the 132 kV transmission line near the western boundary of the site, resulting in an additional setback of approximately 200 m from receiver R2 to the west (i.e. from 1 km to 1.2 km);
- an increased setback of approximately 300 m from receiver R1 to the southwest (from approximately 1.3 km to 1.6 km);
- an increased setback up to an additional 450 m from six residences to the south east (R3, R5, R6, R8, R10 and R11), ranging from between approximately 750 m to 2 km in the original layout to between approximately 1.2 km to 2.7 km in the amended layout;
- a 540 m long vegetation buffer (20 m wide) along the western end of the northern boundary at the closest point facing R4 to mitigate potential visual impacts on this residence; and
- a 490 m long vegetation buffer (20 m wide) at the northern end of the western boundary facing R2 to mitigate potential visual impacts on this residence.

With the increased setbacks, the overall development footprint would be reduced by 57 ha and would be approximately 540 m south of the closest residence (R4), and at least 1.2 km from all other residences.

QPSF has also committed to providing additional screen planting within the curtilage of receiver properties for landowners within 2 km of the project site who request visual screening.

Landscape

The Department recognises that the introduction of the proposed solar farm to a rural landscape would present a material change to the local landscape but considers that it would have a limited impact on the region as a whole. Further, the proposed development would not be visible from Parkes (approximately 8 km southeast of the site), Goobang National Park (approximately 23 km to the east of the site), other surrounding townships in the region or Henry Parkes Way (2 km to the south).

Impacts on the local landscape have been minimised through project design, including the development setbacks along the site boundaries, the retention of existing boundary vegetation and the provision of additional boundary vegetation to provide a visual buffer between the development and surrounding residences.

Residences

The EIS and additional information included a visual impact assessment (VIA) based on representative viewpoints from surrounding receivers, including photomontages and a viewshed analysis. The Department also visited the site on 26 February 2020 and met with surrounding landowners.

With the exception of receiver R2 and R4 (discussed below), the visual impact for all surrounding residences under the amended layout is expected to be minor, as the increased setbacks, reduced development footprint, topography and existing and proposed vegetation would significantly reduce or shield views of the project (see **Table 4**).

Residences R3, R5, R6, R8, R10 and R11 to the south and southeast are located between 1.2 km and 2.6 km from the amended development footprint, and most of these landowners (R5, R8, R10 and R11) objected to the project. The Department considers that views from these residences to the development would be limited due to topography and intervening vegetation or distance from the site or views would be negligible.

Residences R8 and R11 are both located 1.2 km from the amended development footprint and are the closest residences to the south and to the south east of the site. Both residences objected to the development.

Representatives of the Department met with the landowner of residence R8. This residence is situated at a similar elevation to the amended development footprint, and existing vegetation and ancillary structures within this property would minimise the visual impacts of the development. Residence R11 is also situated at a similar elevation to the development footprint and contains existing vegetation and structures within the property that would minimise the visual impacts of the development.

All other residences to the southeast are located around or over 2 km from the amended development footprint, and existing vegetation and topography would minimise the visual impacts of the development. Residences R5 (objection) and R6 are both located over 2 km from the amended development footprint. Although these residences are situated at a higher elevation to the development, the distance between these residences and the development, as well as intervening vegetation within the landscape, would minimise views of the development from these residences.

R3 is located over 2.5 km from the amended development footprint and would not have views to the development due to intervening vegetation and the location of this residence on the southern side of Henry Parkes Way.

Residences R13 and R14 would be nearly 5 km from the development footprint, and visual impacts on these residences would be negligible.

Table 4 | Visual Impacts to Surrounding Residences based on VIA provided by QPSF

Residence	Distance to original development footprint (m)	Distance to amended development footprint (m)	Original assigned Impact	Mitigating factors	Assigned impact under amended layout and additional mitigation measures
R1	1345 (southwest)	1628 (southwest)	Minor	Existing vegetation.	Minor – Negligible
R2	1028 (west)	1200 (west)	Moderate	Existing vegetation	Minor - Moderate
R3	2302 (southeast)	2650 (southeast)	Minor	Distance (>2 km from development footprint) and vegetation	
R4	536 (north)	536 (north)	Moderate	No	Minor
R5	2023 (southeast)	2476 (southeast)	Minor	Distance (>2 km from development footprint) and vegetation	
R6	1676 (southeast)	2149 (southeast)	Minor	Distance (>2 km from development footprint)	
R7	1842 (northeast)	1916 (northeast)	Moderate	Existing vegetation	Minor
R8	900 (south)	1200 (south)	Minor	Existing vegetation	Minor - Negligible
R9	1000 (northeast)	1200 (northeast)	Minor	Existing vegetation	Minor - Negligible
R10	1589 (southeast)	1978 (southeast)	Minor	Existing vegetation	Minor - Negligible
R11	757 (southeast)	1200 (southeast)	Minor	Existing vegetation	Minor
R12	1674 (east)	1674 (east)	Minor	No	
R13	4858 (east)	4858 (east)	-	Distance (>2 km from development footprint) and existing vegetation	Minor
R14	4812 (southeast)	4812 (southeast)	-	Distance (>2 km from development footprint) and existing vegetation	Minor

In regard to the closest residence (R4) to the development (540 m from the development footprint), the views have been substantially reduced by amendments to the project, including the removal of infrastructure from the north west and north east corners of the site, as well as the provision of a 540 m long landscape buffer along the western end of the northern boundary at the closest point to R4.

In regard to residence R2, representatives of the Department met with the landowner, and QPSF consulted with the landowner to determine that the most valued aspect from their residence is to the east towards the site. Accordingly, QPSF amended the project to remove all proposed infrastructure from the far western portion of the site closest to R2, so that the development footprint does not extend to the west of the 132 kV overhead powerline at the western end of the site. This measure would increase the setback distance between R2 and the development footprint from approximately 1 km to 1.2 km.

Further, there is an existing well-established mature vegetation area along the western boundary of the site, which, despite not providing continuous shielding, does provide a visual buffer between the development and R2. The amended site layout also includes a 490 m long vegetation buffer to the south of this existing vegetation area along the western boundary, and the Department has recommended conditions requiring the provision of additional vegetation screening along the northern and western boundaries of the proposed substation to minimise views of the development from residence R2.

Subject to the above mitigation measures, amended site layout and recommended conditions, the Department is satisfied that there would be no significant visual amenity impacts on nearby receivers as a result of the proposed development.

Impacts on Future Dwellings

In addition to concerns raised regarding the potential visual impacts on residence R8, the landowner of residence R8 expressed concerns regarding the potential visual impacts of the development on future dwellings on vacant subdivided landholdings to the south (Lots 503 and 504 DP 750152) and to the west of the site (Lot 509 DP 750152) (see **Figure 8**). The Department notes that there are no development applications approved or on foot for dwellings on these lots.

Under the Parkes LEP, the land is zoned RU1 Primary Production and new dwellings are not permissible on Lots 503, 504 and 509 DP 750152 as they are smaller than the minimum lot size of 400 ha (approximately 114 ha, 141 ha and 100 ha respectively).

However, the Parkes LEP provides dwelling entitlements for any allotment that is less than 400 ha within the RU1 zone if this allotment was created prior to the gazettal of the Parkes LEP or if this allotment is an existing holding.



Figure 8 | Lot boundaries

The lots to the south of the site (Lot 503 and 504) form an existing holding with Lot 625 in DP 750152 (the location of residence R8) and Council has confirmed that the dwelling entitlements on these allotments have been extinguished due to the existing dwelling on residence R8. Consequently, a new dwelling on either of these allotments would not be permissible under the Parkes LEP.

Council has confirmed that Lot 509 has a dwelling entitlement. The lot is approximately 1500 m wide with its eastern and western boundaries 400 m and 2 km respectively from the proposed project development footprint. The Department considers that a dwelling, if approved, could be located on the lot away from the proposed solar farm such that the potential visual impact of the solar farm could be minimised.

Further, the Department has recommended conditions of consent requiring the provision of screen landscaping along the northern and western boundaries of the substation area within the development site (south western corner of the site).

The Department is satisfied that there would not be any significant visual impacts on any potential dwellings within surrounding vacant allotments with dwelling entitlements.

Ancillary Infrastructure and Other

While the control room building (4.5 m high) and operations and maintenance shed (up to 7 m high) are taller structures than the solar arrays, the Department is satisfied that these structures would not be dominant in the landscape, as both structures would be located within the substation area and would be a minimum distance of approximately 1.5 km from the nearest residential receiver.

Further, the Department has recommended conditions requiring the provision of additional screening along the northern and western boundaries of the substation area to minimise visual impacts of the development (including the ancillary control room building and maintenance shed) on nearby residential receivers. Apart from the operations and maintenance shed near the overhead lines adjacent to the substation, the height of the solar panels and associated infrastructure would be relatively low and would be commensurate in scale to agricultural sheds commonly used in the area.

While the 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 receivers, topography, 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. QPSF has also committed to providing additional screen planting within the curtilage of receiver properties for landowners within 2 km of the project site who request visual screening. 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.

The Department notes that the proposal also includes night security lighting and some submissions expressed concern about lighting. The Department has recommended conditions to minimise light spill and associated visual impacts on surrounding receivers. Subject to the recommended conditions, the Department is satisfied that the project would not cause noticeable visual impacts as a result of this lighting.

Cumulative Visual Impacts

Goonumbla Solar Farm and Parkes Solar Farm are located within 2 km to the south of the Quorn Park Solar Farm. Both projects are relatively low lying with panels between 2.2 m and 3.4 m high (Goonumbla and Parkes respectively). There is the potential that the proposed development could result in cumulative visual impacts on nearby receivers including receivers R1, R2, R8, R10 and R11.

Residence R1 is located approximately 1.5 km north west of Goonumbla Solar Farm and approximately 2 km north west of Parkes Solar Farm, but the residence does not have views to these solar farms due to intervening topography and existing intervening vegetation. The Department considers that as there are no views to Goonumbla and Parkes Solar Farms, there is no cumulative impact with the Quorn Park Solar Farm.

Residence R2 has partial and distant views (over 2 km) to the south east to Goonumbla Solar Farm and Parkes Solar Farm. The Department considers that as the visual impact of the Quorn Park Solar Farm on this residence is minimised by the landscape buffers along the northern end of the western boundary and around the substation and intervening vegetation, and given the distance from Goonumbla and Parkes Solar Farms and they are both low lying development, there would not be significant cumulative visual impacts on this residence.

Residence R8, R10 and R11 are between 500 m and 1.5 km north of Goonumbla Solar Farm. Views from these residences to Goonumbla Solar Farm are limited due to it being a relatively low-lying development and the existing intervening vegetation between these residences and Goonumbla Solar Farm. The Quorn Park Solar Farm development footprint is between 1.2 km and 2 km from these residences, and intervening vegetation limits views of the development from these residences. The Department considers that there would not be significant cumulative visual impacts on these residences.

Other residences surrounding the site are located at least 2 km from Goonumbla Solar Farm, including residences R5 and R6, which are both also located over 2 km from Quorn Park Solar Farm.

Conclusion

The Department has recommended conditions requiring QPSF to:

- establish and maintain a mature vegetation buffer along the northern boundary and along the western boundary in accordance with the amended layout to minimise the potential visual impacts on receivers R4 and R2 respectively;
- establish and maintain a vegetation buffer along the northern and western boundaries of the on-site substation to minimise views of the development (including ancillary infrastructure such as the control room building and the operations and maintenance shed) from residence R2;
- minimise the off-site visual impacts of the development, including the potential for any glare or reflection;
- 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 safety purposes; and
- 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 horizon and complies with *Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting*.

Subject to the proposed amended layout, the associated setbacks and the implementation of the recommended conditions, the Department considers that there would be no significant visual impacts, including cumulative visual impacts, on surrounding residences, and the rural character and visual quality of the area would be preserved as far as practicable.

5.2 Compatibility of Proposed Land Use

Provisions of the Parkes LEP

The project site is located wholly within the RU1 Primary Production zone under the LEP. As discussed in **section 3.3**, a solar farm is a prohibited land use 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.

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 not inconsistent with the relevant 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 Parkes Shire LGA has traditionally relied upon agriculture and mining, the growing number of proposed and approved SSD solar farms in the region and in the LGA, including Goonumbla Solar Farm (SSD 7618) and Parkes Solar Farm (SSD 6784), indicates that the local economy is transitioning to accommodate a greater diversity of land uses in the area. The introduction of another solar farm in the LGA would further contribute to a diverse local economy, thereby supporting local businesses and the community, which is consistent with the *Parkes Shire 2030 Community Strategic Plan*. The project is also consistent with the Department's *Central West and Orana Regional Plan 2036*, which identifies the development of renewable energy generation as a priority growth sector for the region.

In addition, the development would not fragment or alienate any resource lands in the LGA, and the land could be easily returned to agricultural land following decommissioning, as the inherent agricultural capability of the land would not be affected in the long term. Further, the project would not sterilise any mineral resources (as discussed further below).

Finally, and most importantly, Council supports the project, subject to the implementation of appropriate environmental mitigation measures.

Potential Impacts on Agricultural Land

Concerns about the project's impact on agricultural land and the cumulative impacts of several solar farms within the locality were raised in the majority of community submissions (76%) objecting to the project.

The project is located within the Central West and Orana Region, which has a strong and diverse agricultural sector. The region includes around 8.9 million ha of agricultural land and over 98,000 ha of mapped Biophysical Strategic Agricultural Land (BSAL).

NSW mapping data indicates that the site (470 ha) is neither mapped as high capability land nor BSAL. Under the *Land and Soil Capability Mapping in NSW* (OEH, 2017), the entire site is mapped as Class 4 (moderate capability land).

However, soil studies submitted with the EIS, which provide a soil assessment of the site based on only five test pits (see **Figure 9**), indicate that for the site:

- the central portion is BSAL (60 % of the site and about 282 ha – based on pits 1, 3 and 5),
- the southern portion is Class 3 (60 % of the site - based on pits 3, 4 and 5); and
- the south eastern portion is both Class 3 and BSAL (40% of the site and about 188 ha - based on pits 3 and 5).

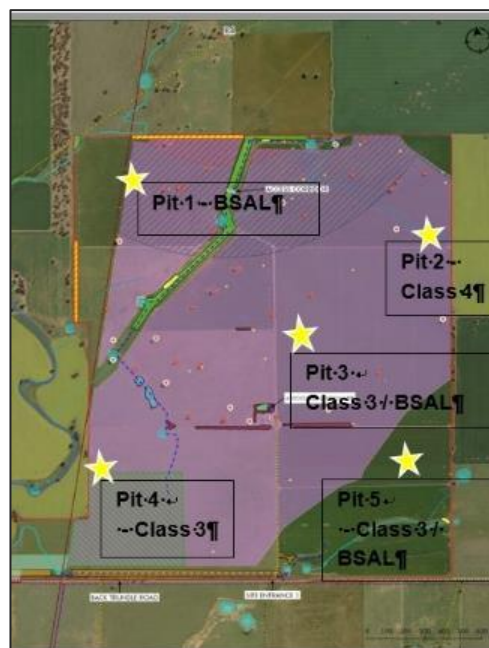


Figure 9 | Soil pit positions within development site based on five pit soil assessment (overlaid on amended development footprint)

This means the land is suited to grazing, but capable of sustaining cultivation on a rotational basis. The remainder of the site was found to be Class 4 (moderate capability) land.

With the exception of the Class 4 Land located in the northeast corner of the site, a large part of the development footprint coincides with BSAL and / or Class 3 land within the site.

The Department notes that the amended development has reduced the development footprint by a total of 57 ha in areas of both BSAL and Class 3 capability to the north west and south east within the site.

The site is currently used for agricultural purposes of livestock grazing and dryland cropping. The development of the solar farm would therefore reduce the agricultural output of the site while the solar farm remains operational. However, the Department notes that the development footprint occupies 73 % of the site, allowing the current agricultural practices to continue in the remaining 27 % (approximately 127 ha) of the site, including the large consolidated area of BSAL and Class 3 land in the southeast

corner of the site which would not include project infrastructure. The Department has also recommended conditions requiring QPSF to implement land management measures to maintain the agricultural capability of the site through the life of the project.

The development footprint of the project combined with other approved and / or operational SSD solar farms in the Central West and Orana region would be approximately 4,000 ha. However, the loss of 4,000 ha of agricultural land in the region represents a very small fraction (approximately 0.05 %) of the 8.9 million ha of land being used for agricultural output in the region and would result in a negligible reduction in the overall productivity of the region.

Furthermore, the inherent agricultural capability of the land would not be affected by the project due to the relatively minor disturbance associated with the development of solar energy projects.

The Department also notes that Council indicated support for the project, subject to consideration of how the development would maintain the agricultural viability of the site and consideration of its contribution to the agricultural productivity of the region, including the provision of grazing throughout the site during the operational phase of the development.

DPI – Agriculture also indicated support for the project, subject to appropriate measures allowing for the agricultural use of the site to continue during the operation of the project and the removal of all infrastructure (including the removal of all underground cabling) and rehabilitation of the land to its full agricultural capability upon decommissioning.

To this end, the Department has included rehabilitation objectives in the recommended conditions to maintain the productivity of the agricultural land during the construction and operation of the project and to fully reinstate the agricultural capability of the land following decommissioning of the project, including the removal of all underground cabling and project infrastructure.

Additionally, the Department has recommended strict land management conditions to control the growth of weeds, reducing the potential spread of weeds to neighbouring properties. In this regard, QPSF would be required to restore the ground cover of the site following construction, maintain the ground cover with appropriate perennial species, manage weeds within the ground cover and maintain grazing within the development footprint where practicable.

QPSF has also committed to a range of mitigation and management measures to maintain and enhance the soil quality of the site throughout all stages of the development. These include the application of lime across the entire site prior to construction, establishing and maintaining perennial groundcover throughout the site during operation of the development, and regular ongoing testing of the soils throughout the site.

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 NSW government for the development of renewable energy in the future;

- the environmental benefits of solar energy, particularly in relation to reducing greenhouse gas emissions;
- the economic benefits of solar energy in an area with good solar resources and capacity in the existing electricity infrastructure; and
- the benefits of dispatchable energy for grid stability and reliability.

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

Potential Impacts on Mining and Exploration

Three exploration licences (ELs) exist over the development site, being EL5323 held by CMOC Mining Pty Ltd, EL7676 held by Modeling Resources Pty Ltd and EL8943 held by Omya, which MEG granted on 18 February 2020.

CMOC Mining Pty Ltd and Modeling Resources have raised no concerns about the proposal being located on the EL holdings. However, Omya Australia Pty Ltd expressed concerns that it would restrict access to limestone deposits associated with EL8943.

MEG has confirmed that QPSF has undertaken adequate consultation with the EL holders and that sufficient information has been provided about the potential land use conflicts of the solar farm and these existing ELs.

Further, the Department notes that EL8943 (Omya) covers a large land area (~170 km²), and that the proposed development footprint occupies less than 2 % of this area. While the ability to access underlying mineral resources may be locally constrained during operation of the solar farm, the Department is satisfied that access to these resources would not be sterilised in the long term following decommissioning and rehabilitation of the project.

5.3 Traffic and Transport

Community submissions expressed concern about the traffic and transport impact of the project and the cumulative traffic impacts of several solar farms within the locality.

Traffic Routes

The designated route for access between the site and the State road network for both light and heavy vehicles (including supply of gravel and water) is to be limited to Henry Parkes Way (State classified road MR61), McGrath Lane (local road) and Back Trundle Road (local road) (see **Figure 10**) at the request of TfNSW and Council.

Henry Parkes Way is a bitumen sealed, two lane, two way classified Arterial Road with two 3.5 m wide lanes in each direction. TfNSW has advised that the section of Henry Parkes Way between Bogan Street and Bushman Street in the Parkes township is not to be used by heavy vehicles in connection

with the development. The proposed haulage route avoids this section, to the satisfaction of TfNSW and Council.

Both McGrath Lane and Back Trundle Road are currently unsealed, gravel local Council roads and are not approved for General Mass Limit (GML) and Concessional Mass Limit (CML) roads. This route is acceptable to Council providing adequate road upgrades are made to both McGrath Lane and Back Trundle Road.

Site access to the solar farm would be via the existing property access off Back Trundle Road. The property site entrance would be upgraded to accommodate heavy vehicles. In addition, the site access to the easement would be off Back Trundle Road whereby a portion of fencing would be removed to enable vehicular access to the property.

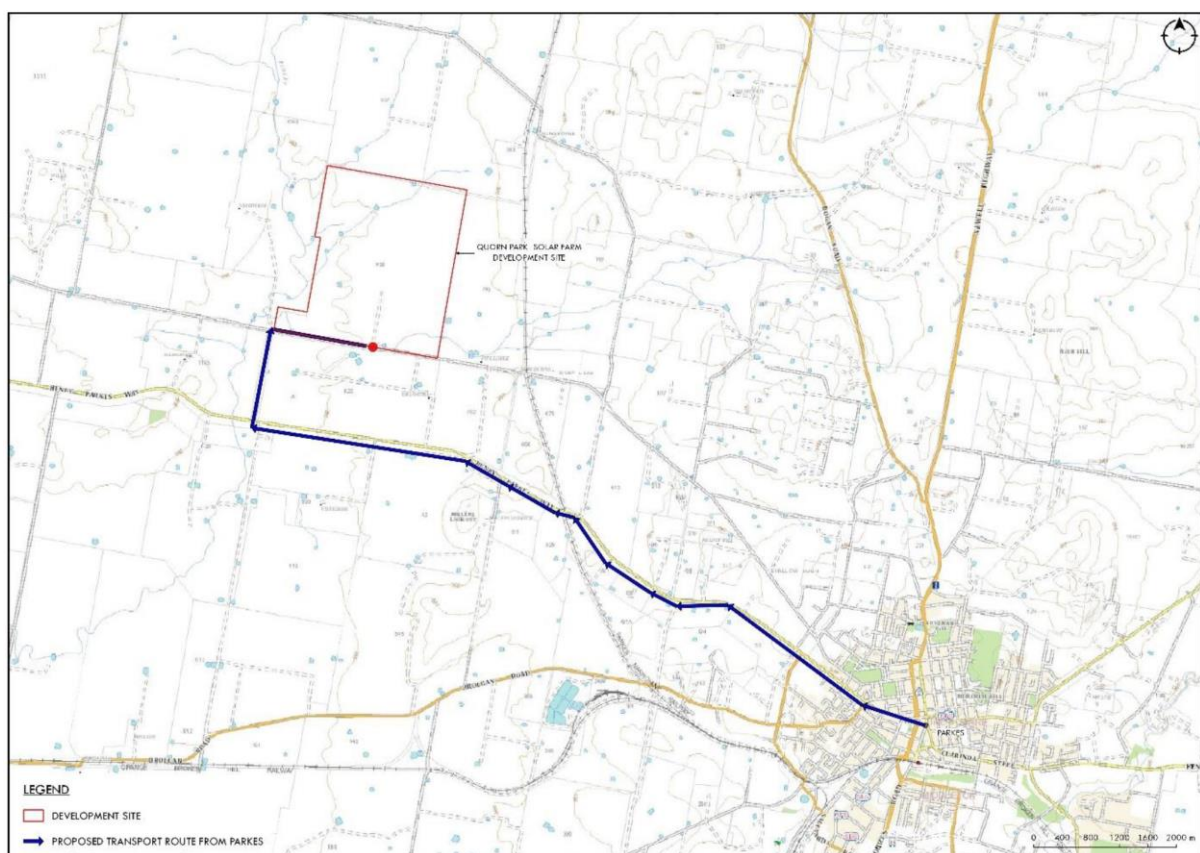


Figure 10 | Haulage Route via Parkes

Traffic Volumes

The main increase in project related traffic would occur during the nine-month construction period, with a peak period of up to six months. The estimated peak daily vehicle trips would be 185 per day (60 light vehicles and 125 heavy vehicles). A peak construction workforce of approximately 130 workers (including contractors) would be required onsite for six months.

The Department notes that QPSF proposes to use a coach service to transport workers (65%) to and from the site from the nearby township of Parkes (approximately 8.5 km south-east of the solar farm) to minimise light vehicle movements. The Department has included a requirement within the Traffic

Management Plan for QPSF to develop measures to ensure employee use of this service, which is supported by TfNSW and Council.

Additionally, it is anticipated that there would be three oversize/over mass vehicle movements during the construction period to facilitate the transportation of the substation components. As construction activities would be restricted to daytime hours, construction related vehicles would be using the local road network during the day only.

Traffic generation during operations would be negligible (i.e. up to 4 light vehicle and 4 heavy vehicle trips per day).

Cumulative Traffic Volumes

The project would not overlap with construction of the Goonumbla Solar Farm, as construction works for Goonumbla Solar Farm were completed in May 2020.

There would be no significant cumulative traffic impacts with Jemalong Solar Farm given the distance (75 km away) between the two projects.

Road Upgrades and Maintenance

TfNSW and Council support the proposed transport route, subject to the recommended conditions requiring road upgrades to be undertaken to support the increased traffic associated with this project (see **Figure 11**). These include:

- Basic Right Turn and Basic Left Turn (BAR/BAL) treatment to the intersection of McGrath Lane and Henry Parkes Way to accommodate Type 1 Road Trains and constructed to a 100 km/h speed limit and designed to accommodate Type 1 Road Trains and Performance Based Standards combination up to 36.5 m in length;
- widening of pavement and bitumen seal McGrath Lane to a width of 9 m road formation (8 m sealed with 0.5 m unsealed shoulder on either side), for at least a distance of 100 m from Henry Parkes Way;
- widening and bitumen seal McGrath Lane to a width of 9 m road formation (8 m sealed with 0.5 m unsealed shoulder on either side), for at least a distance of 100 m from Back Trundle Road;
- construction of Rural Sealed intersection to the intersection of Back Trundle Road and McGrath Lane to cater for the largest vehicle accessing the site (excluding over – dimensional vehicle);
- widening and bitumen seal Back Trundle Road to a width of 9m road formation (8 m sealed with 0.5 m unsealed shoulder on either side), for at least a distance of 100 m from McGrath Lane; and
- rural property access type upgrade to the existing site access point to Back Trundle Road.

Council has requested that QPSF enter into a Memorandum of Understanding for a road maintenance agreement for rehabilitation works for McGraths Lane and Back Trundle Road. The Department has recommended conditions to address road maintenance requirements.

Council requested a dilapidation survey of the local road portions of the haulage route be undertaken prior to the commencement of construction and throughout construction work, with necessary repairs

to be undertaken to maintain the road asset. The Department has included a requirement for QPSF to prepare a Traffic Management Plan in consultation with Council and TfNSW, which includes a requirement to undertake dilapidation surveys to assess the condition of McGraths Lane and Back Trundle Road prior to and following construction, upgrading and decommissioning activities, and to repair any damage identified by the surveys.

The proposal includes a temporary carpark that will be located within the development footprint. The carpark would be accessible via the existing site entrance and the proposed site access tracks and would not be sealed but constructed of road base materials. QPSF has advised that the location within the development footprint would be determined by the EPC contractor, and details would be included in the Traffic Management Plan.



Figure 11 | Overview of Road Upgrades

Recommended Conditions

The Department has recommended conditions of consent requiring QPSF to:

- undertake the relevant road upgrades prior to the commencement of construction;
- restrict the number of vehicles during construction, upgrading and decommissioning to the peak volumes identified above;
- ensure the length of vehicles (excluding over-dimensional vehicles) does not exceed 19 m; and
- prepare a Traffic Management Plan in consultation with TfNSW and Council, including provisions for dilapidation surveys, measures to minimise cumulative traffic with nearby solar farms, details of the measures that would be implemented to address road safety, including consideration of school buses, other motorists and road users.

Subject to the recommended conditions, the Department, TfNSW and Council are satisfied that the project would not result in significant impacts on road network capacity, efficiency or safety.

5.4 Other Issues

The Department's consideration of other issues is summarised in **Table 5**.

Table 5 | Other Issues

Findings	Recommended Conditions
Biodiversity	
<ul style="list-style-type: none"> The site is mostly comprised of cleared agricultural land with small patches of remnant native vegetation. The project layout has been designed to avoid clearing of native woodland vegetation, including 5.44 ha of White Box Yellow Box Blakeley's Red Gum woodland (Box Gum woodland). However, 2.96 ha of White Cypress and Yellow Box woodland vegetation, 0.04 ha of Red Gum woodland vegetation and 37 paddock trees (including 12 hollow bearing trees) would be removed. All native vegetation to be removed represent White Cypress Pine tall woodland (PCT 82), Riparian Red Gum woodland (PCT 278) and Yellow Box Grassy woodland (PCT 437) for the purpose of calculating credit offset requirements. Two threatened species were assumed present, including the Sloane's Froglet (1 species credit) within PCT 278 located within the development site and the Bush Stone-curlew (3 species credits) within PCT 82 located within the vegetation disturbance area associated with the road upgrades at the intersection of Henry Parkes Way and McGraths Lane, generating a total of 4 species credits. A total of 92 ecosystem credits are required to offset the impacts of the project, including 88 credits within the development site and 4 credits within the vegetation disturbance area associated with the road upgrades at the intersection of Henry Parkes Way and McGraths Lane. The other road upgrades required for the development, including upgrades to the intersection of McGrath Lane and Back Trundle Road and road widening works along Back Trundle Road, would not generate any additional species or ecosystem credits. QPSF would be required to retire these credits in accordance with the NSW Biodiversity Offset Scheme. Subject to the recommended conditions, the Department and BCD consider that the project is unlikely to result in a significant impact on the biodiversity values of the locality. 	<ul style="list-style-type: none"> Retire required offset species in accordance with the <i>NSW Biodiversity Offsets Scheme</i> for Major Projects. Prepare a Biodiversity Management Plan in consultation with BCD.
Noise	
<ul style="list-style-type: none"> Community submissions expressed concern about cumulative noise impacts of several solar farms within the locality. Goonumbla Solar Farm, which completed construction in May 2020, and Parkes Solar Farm, which is operational, would not have a cumulative construction noise impact on the project. Noise generated by the proposed construction, upgrading and decommissioning activities was predicted to be 33dB(A) at the closest non-associated receivers (R03 and R04) and less than 30dB(A) at all other non-associated receivers, and therefore well below the 'noise affected' criterion of 45 dB(A) in the EPA's <i>Interim Construction Noise Guidance</i> (ICNG) at all non-associated residences. 	<ul style="list-style-type: none"> Minimise the noise generated by any construction, upgrading or decommissioning activities on site in accordance with best practice requirements outlined in the ICNG. Restrict construction hours to Monday to Friday 7 am – 6 pm, and Saturday 8 am – 1 pm.

Findings	Recommended Conditions
<ul style="list-style-type: none"> • Notwithstanding, QPSF has committed to implement the noise mitigation work practices set out in the ICNG, including scheduling activities to minimize noise, using quieter equipment and establishing a complaint handling procedure. The Department is satisfied that there would be no significant noise impacts from the project or cumulative impacts on non-associated receivers. • Road traffic noise during construction of the project would comply with the relevant criteria in the EPA's Road Noise Policy. • There would be negligible noise during operation. 	
Water Availability and Site Runoff	
<ul style="list-style-type: none"> • A number of community submissions expressed concerns regarding the impacts the project would have on downstream surface water flows, flooding and local groundwater availability. • The site includes five watercourses, including four second order watercourses and one third watercourse. However due to the long-term agricultural use of the site, these watercourses are no longer discernible. • The site is not identified as flood prone under the Parkes LEP, and the development has been designed to minimise site runoff and surface water flows. In addition, the development footprint has been sited away from watercourses mapped within the site. • Critical project infrastructure, including the substation and battery storage area, has been located outside a flood zone in a 1 % AEP event. Whilst a portion of the solar panels are located within flood areas in a 1% AEP event, these areas are considered to be low risk flood areas. Therefore, the Department considers the project is unlikely to have a significant effect on surface water behaviour. • The Department considers any erosion and sedimentation risks associated with the project can be effectively managed using best practice construction techniques and relevant legislative policies and guidelines. • The project would require up to 7.5 ML of water during construction (mainly for dust suppression) and 116 kL of water annually during operation. A static water supply (20,000 litres) would also be established and maintained for fire protection. • Water demands during construction, decommissioning and operation would be met by non-potable water being trucked to the site. • Council has provided in principle support for supply of non-potable water for the development. 	<ul style="list-style-type: none"> • Prohibit water pollution in accordance with Section 120 of the <i>Protection of the Environment Operations Act 1997</i>. • Undertake activities in accordance with <i>Managing Urban Stormwater: Soils and Construction</i> (Landcom, 2004) manual and <i>Guidelines for Controlled Activities on Waterfront Land</i> (DPI Water, 2018). • The Applicant must ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of the development to match its available water supply. • Prepare a flood response plan detailing procedures and options for safe access to and from the site in the event of flooding. • Ensure the solar panels and ancillary infrastructure (including security fencing) are designed, constructed and maintained to reduce impacts on surface water, flooding and groundwater at the site.

Findings	Recommended Conditions
<p>Heritage</p> <ul style="list-style-type: none"> • Site surveys identified 27 Aboriginal heritage sites within the site, including 23 isolated finds and four artefact scatters of flakes and cores. These surveys were conducted in consultation with Registered Aboriginal Parties (RAPs) and the sites are considered to be of low significance. • No historic heritage items were found on site. • Three of the artefact scatters and two of the isolated artefacts would not be impacted. Of the sites that would be impacted, the overall impact of the development on the heritage values of these sites is low, as these sites exist within a highly disturbed landscape. • QPSF has committed to provide ongoing management opportunities through the preparation of an Aboriginal Cultural Heritage Management Plan (ACHMP) in consultation with RAPs. • If Aboriginal artefacts or skeletal material are identified during construction of the project all work would cease and an unexpected finds procedure would be implemented. • With these measures, the Department and BCD consider that the project would not significantly impact the heritage values of the locality. 	<ul style="list-style-type: none"> • Ensure the development does not cause any direct or indirect impacts on any items located within exclusion zones or outside the approved development footprint. • Salvage and relocate Aboriginal items to suitable alternative locations. • Undertake consultation with Aboriginal stakeholders, prior to construction. • Prepare and implement Heritage Management Plan, including procedures for unexpected finds, in consultation with RAPs.
<p>Land Values</p> <ul style="list-style-type: none"> • A number of submissions raised concerns that the project would have an adverse impact on neighbouring land values, particularly as a result of the proximity of the proposed solar farm. • The Department notes that: <ul style="list-style-type: none"> • 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, to be implemented; 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. 	<ul style="list-style-type: none"> • No specific conditions required

Findings	Recommended Conditions
Hazards <ul style="list-style-type: none"> The project would comply with the International Commission on Non-Ionizing Radiation Protection (ICNIRP) guidelines for electric, magnetic and electromagnetic fields. The Department is satisfied that the bushfire risks can be suitably controlled through the implementation of standard fire management procedures and recommendations made by the RFS and FRNSW. The site is not mapped as bushfire prone land under Parkes LEP and the undulating topography allows surface water to drain from the site without ponding or causing flooding. Further, DPIE Water, BCD and Council raised no concerns about flooding. 	<ul style="list-style-type: none"> The development must comply with the relevant requirements in the RFS's <i>Planning for Bushfire Protection 2019</i> (or equivalent) and Standards for Asset Protection Zones. Defendable space and solar arrays are to be managed as an APZ and the development is suitable equipped to respond to fires including water supply tank and appropriate connectors. Prepare and implement an Emergency Plan in consultation with RFS and FRNSW.
Decommissioning and Rehabilitation <ul style="list-style-type: none"> Some community submissions raised concerns about decommissioning, rehabilitation and the use of the land after its operational life. The Department has developed standard conditions for solar farms to cover this stage of the project life cycle, including clear decommissioning triggers and rehabilitation objections such as removing all above and below ground infrastructure and restoring land capability to its pre-existing agricultural use. 	<ul style="list-style-type: none"> Include rehabilitation objectives requiring the site to be rehabilitated within 18 months of cessation of operations.
Workforce Accommodation <ul style="list-style-type: none"> Some of the submissions expressed concerns that the project would not produce long-term economic benefits to the community and that there would be a lack of local employment opportunities. The project would generate direct and indirect benefits to the local community, including: <ul style="list-style-type: none"> up to 130 jobs during the 12 month construction period expenditure on accommodation and businesses in the local economy by workers who would reside in Parkes LGA; the procurement of goods and services by QPSF and any associated contractors; and upgrading of roads used by project related traffic. The project would utilise accommodation within the Parkes LGA and source workers from the local area. The Department has also considered the demand on public services and infrastructure in the Parkes LGA and is satisfied that its recommended conditions address the only material impact of the project on these matters (i.e. roads). Noting the above, the Department considers that the project would provide economic benefits for the local community. The Department is satisfied that the project would provide economic benefits to the local community and that there is sufficient accommodation, services and infrastructure within the Parkes LGA and surrounding areas to accommodate project related workers. 	<ul style="list-style-type: none"> No specific conditions required.

6. Recommended Conditions

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

The Department consulted with QPSF and the relevant agencies on the conditions for the project, particularly Council and TfNSW in regard to the road upgrades and maintenance requirements.

These 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, amenity, water, flooding and bushfire impacts, and has required the following management plans be prepared and implemented:

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

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

Other key recommended conditions include:

- *roads* – requiring relevant road upgrades are undertaken prior to the commencement of construction;
- *biodiversity offsets* – retiring biodiversity offset credits in accordance with the *NSW Biodiversity Offsets Scheme*;
- *operating hours* – undertaking construction, upgrading or decommissioning activities on-site during standard construction hours, unless these activities that are inaudible at non-associated receivers;
- *visual* – minimising the off-site visual and lighting impacts of the project, including the potential for any glare or reflection, and ensuring the visual appearance of all ancillary infrastructure (including paint colours) blends in as far as possible with the surrounding landscape;
- *water and flooding* – ensuring the solar panels and ancillary infrastructure (including security fencing) are designed, constructed and maintained to reduce impacts on surface water, flooding and groundwater at the site; and
- *fire* - ensure that the development complies with the relevant asset protection requirements in the RFS's *Planning for Bushfire Protection 2019* (or equivalent).

7. Evaluation

The Department has assessed the development application, EIS, submissions, Submissions Report, additional information and amended project layout provided by QPSF 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 site is located in a rural area, with the nearest non-associated residence located about 540 m north of the development footprint at its closest point. All other non-associated residences are located more than 1 km from the development footprint. The site is located in close proximity to Henry Parkes Way and the Newell Highway and would have direct access to the electricity network via the Essential Energy transmission line located approximately 700 m to the south west of the site.

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 been largely designed to avoid key constraints, including watercourses and nearby non-associated residences. Any residual impacts would be relatively minor and can be managed through the recommended conditions of consent.

In response to submissions on the project and the Department's further information requests, QPSF amended the project by removing the substation and critical infrastructure from the south west corner of the site, providing increased development setbacks from the project site boundaries, reducing the development footprint by 57 ha and providing vegetation screening along sections of the northern and western site boundaries.

By providing these amendments, the potential visual impacts on the landscape and surrounding residences have been reduced. These amendments have also reduced impacts on agricultural land, site runoff and heritage items.

Distance, topography and vegetation would provide natural screening from most residences. Subject to the recommended conditions, the Department considers that there would be no significant visual impacts on surrounding residences.

There would be minimal localised cumulative impacts as a result of the proposed development, including visual, noise and traffic.

Both the Department and Council consider a solar farm development to be a suitable land use for the site. The project would not result in any significant reduction in the overall agricultural productivity of the region. Additionally, QPSF would manage ground cover within the site, and the site could be returned to agricultural uses after the project is decommissioned, ensuring that the inherent agricultural capability of the land would not be affected in the longer term.

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, managed and/or offset. QPSF has reviewed the conditions and does not object to them.

Importantly, the project would assist in transitioning the electricity sector from coal and gas-fired power stations to low emissions sources. It would generate approximately 200,000 MWh of clean electricity annually, which is enough to power over 30,000 homes and save over 164,000 tonnes of greenhouse gas emissions per year. The project is therefore consistent with the goals of NSW's *Climate Change Policy Framework* and *NSW Net Zero Plan Stage 1: 2020 – 2030*.

Further, the project includes an energy storage facility, with a capacity of 20 MW / 20 MWh, that would enable the project to store solar energy for dispatch to the grid outside of daylight hours and / or during periods of peak demand, which has the potential to contribute to increased grid stability and energy security.

The 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 through job creation and capital investment.


On balance, the Department considers that the project is in the public interest and should be approved, subject to the recommended conditions of consent (see **Appendix H**).

8. Recommendation

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

- **considers** the findings and recommendations of this report;
- **accepts and adopts** all of the findings and recommendations in this report as the reasons for making the decision to grant consent to the application;
- **agrees** with the key reasons for approval listed in the notice of decision;
- **grants consent** to the application in respect of the Quorn Park Solar Farm (SSD 9097); and
- **signs** the attached development consent and recommended conditions of consent (see Appendix H).

Recommended by:



15 / 7 / 20

Lander Robinson
Senior Environmental Assessment Officer
Energy Assessments



15 / 7 / 20

Iwan Davies
Team Leader
Energy Assessments



15 / 7 / 20

Nicole Brewer
Director
Energy Assessments

9. Determination

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



16 July 2020

Mike Young

Executive Director

Energy, Resources and Compliance

Appendices

Appendix A – List of referenced documents

Quorn Park Solar Farm Environmental Impact Statement, Premise Australia, 22 October 2019

Quorn Park Submissions Report, Premise Australia, January 2020

Quorn Park Amendment Letter, Renewable Energy Developments, 23 January 2020

Quorn Park Additional Information Memorandum, Premise Australia, 30 March 2020

Quorn Park Additional Information Memorandum, Premise Australia, 7 May 2020

Quorn Park Amendment Report, Premise Australia, 20 May 2020

Appendix B – Environmental Impact Statement

See the Department's website at:

<https://www.planningportal.nsw.gov.au/major-projects/project/9711>

Appendix C –Submissions

See the Department's website at:

<https://www.planningportal.nsw.gov.au/major-projects/project/9711>

Appendix D – Submissions Report

See the Department's website at:

<https://www.planningportal.nsw.gov.au/major-projects/project/9711>

Appendix E – Amendment Letter and Amendment Report

See the Department's website at:

<https://www.planningportal.nsw.gov.au/major-projects/project/9711>

Appendix F – Additional Information

See the Department's website at:

<https://www.planningportal.nsw.gov.au/major-projects/project/9711>

Appendix G – Statutory Considerations

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

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

The Department has considered all 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	<p>The objects of most relevance to the Minister's decision on whether to approve the project are found in Section 1.3(a), (b), (c), (e) and (f) of the EP&A Act.</p> <p>The Department considers the project encourages the proper development of natural resources (Object 1.3(a)) and the promotion of orderly and economic use of land (Object 1.3(c)), particularly as the project:</p> <ul style="list-style-type: none">• includes approximately 250,000 single-axis or fixed tilt tracking solar panels (up to 4 m high), 19 inverter stations (up to 2.5 m high), a control room building (up to 4.5 m high) and operations and maintenance shed (up to 7.5 m high);• is a permissible land use on the subject land;• is located in a logical location for efficient solar energy development;• is able to be managed such that the impacts of the project could be adequately minimised, managed, or at least compensated for, to an acceptable standard;• would generate up to 130 construction jobs and 3 full time equivalent jobs;• would contribute to a more diverse local industry, thereby supporting the local economy and community;• would not fragment or alienate resource lands in the LGA; and• is consistent with the goals of NSW's <i>Climate Change Policy Framework</i> and <i>Net Zero Plan Stage 1: 2020 – 2030</i> and would assist in meeting Australia's renewable energy targets whilst reducing greenhouse gas emissions. <p>The Department has considered the encouragement of ESD (Object 1.3 (b)) in its assessment of the project. This assessment integrates all significant socio-economic and environmental considerations and seeks to avoid any potential serious or irreversible environmental damage, based on an assessment of risk-weighted consequences.</p> <p>In addition, the Department considers that appropriately designed SSD solar development, in itself, is consistent with many of the principles of ESD. QPSF has also considered the project against the principles of ESD. Following its consideration, the Department considers that the project can be carried out in a manner that is consistent with the principles of ESD.</p> <p>Consideration of environmental protection (Object 1.3(e)) is provided in section 5.4 of this report. Following its consideration, the Department considers that the project could be undertaken in a manner that would at least maintain the biodiversity values of the locality over the medium to long term and would not significantly impact threatened species and ecological communities of the locality. The Department is also satisfied that any residual biodiversity impacts could be managed and/or mitigated by imposing appropriate conditions and retiring the required biodiversity offset credits.</p> <p>Consideration of the sustainable management of built and cultural heritage (Object 1.3(f)) is also provided in section 5.4 of this report. Following its consideration, the Department considers the project would not significantly impact the built or cultural heritage of the locality.</p>

Aspect	Summary
	The Department is satisfied that any residual impacts on heritage can be managed and/or mitigated by imposing appropriate conditions.
State Significant Development	Under Section 4.36 of the EP&A Act the project is considered a State Significant Development. The Minister for Planning and Public Spaces is the consent authority for the development. Under the Minister's delegation of 9 March 2020, the Executive Director, Energy, Resources and Compliance, may determine the project.
Environmental Planning Instruments	<p>The <i>Parkes Local Environment Plan</i> (LEP) 2012 applies and is discussed in section 2.1 and 3.3 of this report, particularly regarding permissibility and land use zoning. The Project is permissible under the Infrastructure SEPP. In accordance with the Infrastructure SEPP, the Department has given written notice of the project to TransGrid, Essential Energy and TfNSW.</p> <p>QPSF completed a preliminary risk screening and preliminary hazard analysis in accordance with <i>SEPP No. 33 – Hazardous and Offensive Development</i>. The Department's consideration of this analysis is discussed in section 5.4.</p> <p>The Department has considered the provisions of the <i>SEPP (Primary Production and Rural Development) 2019</i>. Of relevance to the project, the SEPP aims to facilitate the orderly economic use and development of lands for primary production, to reduce land use conflict and sterilisation of rural land and to identify State significant agricultural land. While the location of State significant agricultural land has not been finalised, the Department has considered all of these matters in Section 5.2 of this report.</p> <p>The Department has considered the provisions of <i>SEPP No. 55 – Remediation of Land</i>. 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.</p> <p>Parkes Shire Council is listed under <i>SEPP No. 44 – Koala Habitat Protection (SEPP 44)</i>. QPSF's assessment concluded that the vegetation within the site is not considered potential Koala habitat, and the Department has considered this in section 5.4 of this report.</p>

Appendix H – Recommended Consent

See the Department's website at:

<https://www.planningportal.nsw.gov.au/major-projects/project/9711>