



# ***Avonlie Solar Farm***

*State Significant  
Development Assessment  
(SSD 9031)*

August 2019

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# Executive Summary

RES Australia Pty Ltd proposes to develop a new 200 megawatt (MW) solar farm with 10 MW/10 MW-hour (MWh) of battery storage approximately 20 kilometres (km) southeast of Narrandera in the Riverina Murray Region of NSW.

The project site is located in close proximity to the Sturt Highway and has direct access to the electricity network via two TransGrid transmission lines which traverse the site. The site is located in a rural area, with the nearest non-associated dwelling located about 1.8 km away.

## Engagement

The Department exhibited the Environmental Impact Statement for the project and received advice from 10 government agencies. No submissions were received from the general public or special interest groups. The Department also consulted with Narrandera Shire Council (Council) and the relevant government agencies throughout the assessment and inspected the site on 14 March 2018.

Narrandera Shire 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 advice from Council and the Office of Environment and Heritage, the Applicant revised its proposed road upgrades. This has led to better road safety outcomes and a reduction in native vegetation disturbance within the road reserve.

## Assessment

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

The project site is currently used for agricultural purposes, including cropping and grazing, and the soils are classified as having Class 3 High Land Capability under the *Land and Soil Capability Mapping in NSW* (OEH, 2017), meaning that the land is capable of sustaining cultivation on a rotational basis. The development footprint (550 hectares) does not include any mapped Biophysical Strategic Agricultural Land, and even with the other approved solar farms in the region, it would only contribute to the loss of 6,860 hectares (i.e. 0.07%) of agricultural land in the Riverina Murray region.

In addition, the development would not fragment or alienate resource lands in the LGA, as the land could be easily returned to agricultural land following decommissioning and, therefore, the impact is temporary in nature as the inherent agricultural capability of the land would not be affected in the longer term.

Given this, the Department considers that the project would not significantly reduce the overall agricultural productivity of the region and is satisfied that the site could be returned to agricultural uses in the future.

The potential traffic impacts would be relatively short-term, minor in nature and can be managed in accordance with Government policy. The road upgrades have been designed to satisfy the relevant road safety standards, and the requirements of Council and the Roads and Maritime Services. The Department has recommended strict conditions requiring road upgrades and a comprehensive Traffic Management Plan.

The project has been designed to largely avoid impacts on vegetation and threatened species in the locality and all unavoidable impacts (including 2.44 ha of native vegetation clearing) would be offset in accordance with Government policy, which is included as a requirement in the recommended conditions of consent.

The Department has recommended a condition requiring an accommodation and employment strategy be prepared and implemented by RES to ensure there would be sufficient accommodation to house construction workers, and to prioritise the employment of local workers.

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

### **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 Department's *Large-Scale Solar Energy Guideline*.

The project is consistent with the Commonwealth's *Renewable Energy Target* and NSW's *Climate Change Policy Framework* and *Renewable Energy Action Plan*, as it would contribute 200 MW of renewable energy to the National Electricity Market, including a battery storage facility with a capacity of 10 MW/10 MWh. Importantly, the battery would enable the project to store solar energy for dispatch to the grid, which would contribute to increased grid stability and energy security.

The project would also provide flow-on benefits to the local community, including up to 200 construction jobs and a capital investment of \$250 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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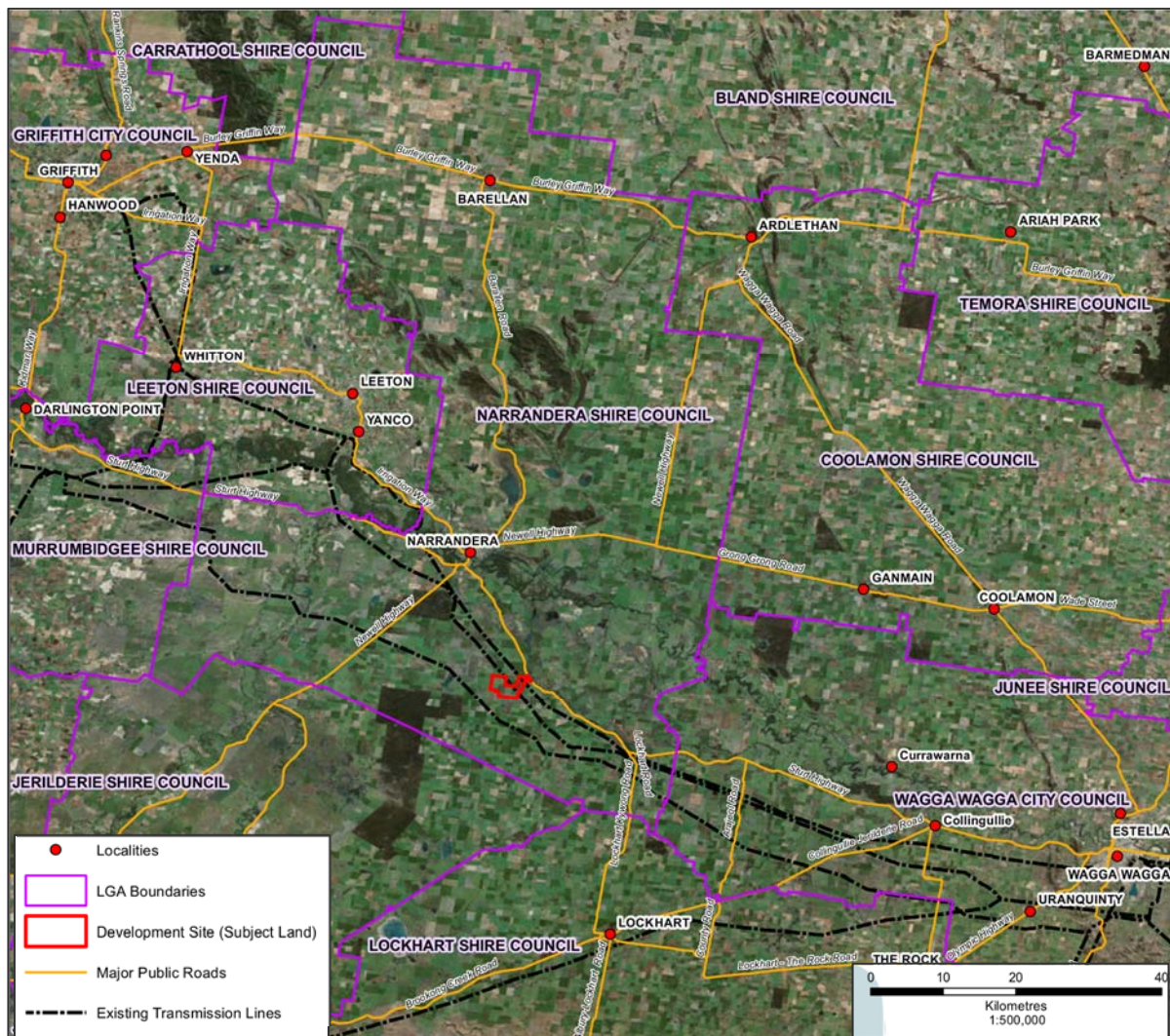


# 1. Project

RES Australia Pty Ltd (RES) proposes to develop a new State significant development solar farm approximately 20 kilometres (km) southeast of Narrandera, in the Narrandera Shire local government area (LGA) (see **Figure 1**).

The project involves the construction of a new solar farm with a generating capacity of approximately 200 megawatt (MW) and 10 MW/10 MW-hour (MWh) of battery storage. It also involves the upgrading and decommissioning of infrastructure and equipment in the future. 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 connect to TransGrid's existing 132 kilovolt (kV) overhead transmission lines that transect the development site at two locations. RES amended its development application in discussion with TransGrid to include two connection points as this would facilitate better network management and minimise risks in the event of a line outage.



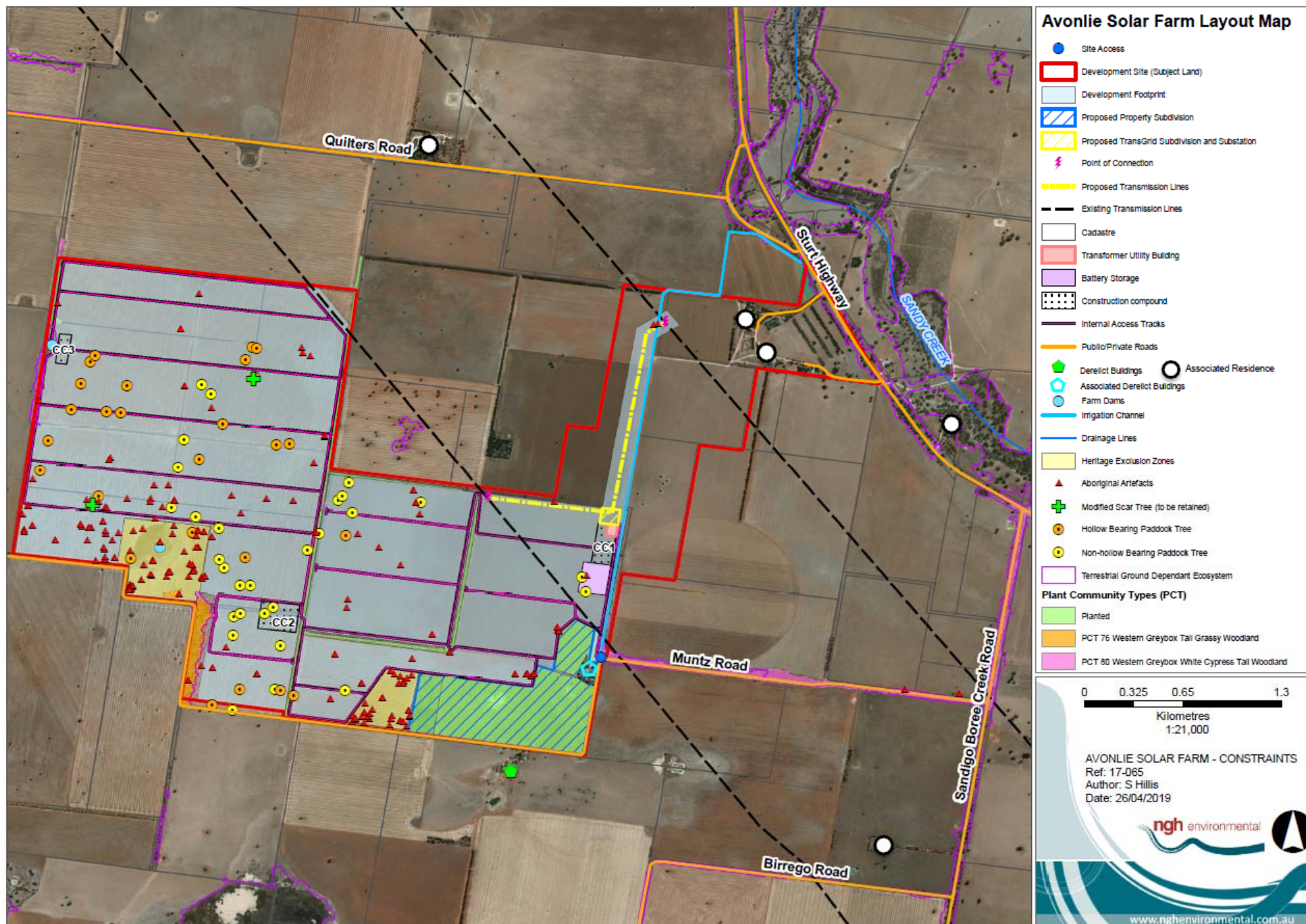
**Figure 1** | Regional Context

The key components of the project are summarised in **Table 1**, depicted in **Figure 2**, and described in the Environmental Impact Statement (EIS) (see **Appendix B**), amended development application and Submissions Report (see **Appendix E**).

**Table 1** | Main Components of the Project

Aspect	Description
Project summary	<p>The project includes:</p> <ul style="list-style-type: none"> <li>• approximately 670,000 single-axis tracking solar panels (up to 4 m high) and 41 inverters (up to 3 m high);</li> <li>• a lithium-ion battery storage facility (10 MW/10 MWh);</li> <li>• an on-site substation and two connection points to TransGrid's 132 kV transmission lines;</li> <li>• internal access tracks, staff amenities, maintenance building, offices, storage shed (up to 6 m high), laydown areas, car parking and security fencing; and</li> <li>• subdivision of land within the site to be retained by the landowner and for the substation.</li> </ul>
Project area	802 ha (with a 550 ha development footprint)
Access route	All vehicles would access the site via the Sturt Highway, Sandigo Road and Muntz Road.
Site entry and road upgrades	<ul style="list-style-type: none"> <li>• A new site entry point off Muntz Road would be constructed.</li> <li>• Upgrades to Sandigo Road and Muntz Road and the intersections of Sturt Highway/Sandigo Road and Sandigo Road/Muntz Road.</li> </ul>
Operational life	<ul style="list-style-type: none"> <li>• The expected operational life of the infrastructure is approximately 30 years. However, the project may involve infrastructure upgrades that could extend the operational life.</li> <li>• The project also includes decommissioning at the end of the project life, which would involve removing all infrastructure.</li> </ul>
Construction	<ul style="list-style-type: none"> <li>• The construction period would last for up to 18 months.</li> <li>• Construction hours would be limited to Monday to Friday 7 am to 6 pm, and Saturday 8 am to 1 pm.</li> </ul>
Hours of operation	Daily operations and maintenance would be undertaken Monday to Friday 7 am to 6 pm and Saturday 8 am to 1 pm.
Employment	Up to 200 construction jobs and 4 operational jobs.
Capital investment value	\$250 million





**Figure 2 | Project Layout**





## 2. Strategic Context

### 2.1 Site and Surrounds

The project is located on an 802 hectare (ha) site in the Riverina Murray region of NSW. The site is zoned RU1 – Primary Production under the *Narrandera Shire Council Local Environment Plan 2013* (Narrandera LEP) and is used for agricultural purposes, including cropping and grazing. Areas of remnant native vegetation exist primarily along fence lines and road sides.

The proposed development footprint is 550 ha and was designed to avoid site constraints, including native vegetation, Aboriginal heritage items and a grassed irrigation channel (see **Figure 2**).

Land surrounding the site is also zoned RU1 and is primarily used for agricultural purposes (cropping and grazing), with the exception of the Sturt Highway which abuts the north eastern corner of the site. Seven dwellings are located within 2 km of the site, six of these are associated with the project. The closest non-associated dwelling is about 1.8 km west of the site and would have distant views of the site that are largely screened by existing vegetation.

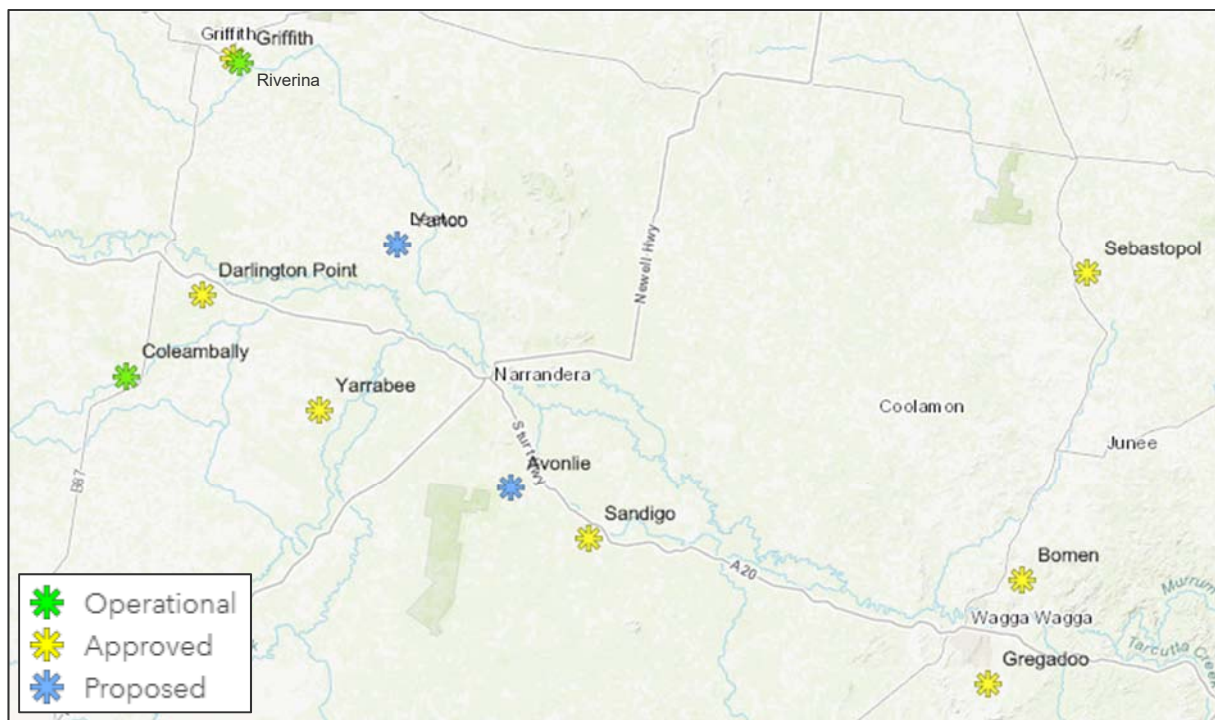
Two 132 kV TransGrid transmission lines traverse the site from northwest to southeast. The solar farm would connect to both transmission lines via two easements extending north and west of the proposed substation.

### 2.2 Other Solar Farms

The Riverina Murray Region has attracted considerable interest from solar developers given the presence of major transmission lines and existing electricity substations. There are nine approved and one proposed State significant development solar farms within approximately 100 km of the project, with the nearest solar farm located over 15 km from the site (see **Table 2** and **Figure 3**).

**Table 2** | Nearby solar farms

Project	Capacity (MW)	Status	Approximate distance from the project (km)
Sandigo Solar Farm	100	Approved	15
Yarrabee Solar Farm	900	Approved	34
Yanco Solar Farm	60	Proposed	43
Darlington Point Solar Farm	275	Under construction	57
Coleambally Solar Farm	150	Operational	63
Griffith Solar Farm	60	Operational	80
Riverina Solar Farm	30	Under construction	81
Bomen Solar Farm	100	Approved	81
Gregadoo Solar Farm	45	Approved	81
Sebastapol Solar Farm	90	Approved	95



**Figure 3 | Nearby Solar Farms**

Given the distance of the Avonlie Solar Farm from other projects in the region, there would be no significant cumulative visual or noise impacts. In addition, while the surrounding regional road network may experience an increase in traffic numbers, there would be no significant cumulative impact on the local roads along the proposed transport route, as discussed further in **section 5.2**.

Other potential cumulative impacts at a regional level relate to agricultural land and workforce accommodation.

Coleambally Solar Farm, Griffith Solar Farm, Darlington Point Solar Farm and Riverina Solar Farm are either operational or currently under construction. As such, there would be no overlap in construction periods.

Bomen Solar Farm, Gregadoo Solar Farm and Sebastapol Solar Farm are located over 80 km from the site and closer to Wagga Wagga and do not have potential for any significant cumulative impacts.

However, there is the potential for construction of the project to overlap with the construction of the approved Sandigo Solar Farm and Yarrabee Solar Farms and the proposed Yanco Solar Farm (if approved). Workforce accommodation for these solar projects would be sourced from the local and wider region, including neighbouring towns and LGAs, as discussed further in **section 5.4**.

The potential cumulative impact on agricultural land in the region is discussed further in **section 5.1**.

## 2.3 Energy Context

In 2018, NSW derived approximately 17.4% of its energy from renewable sources. The rest was derived from fossil fuels, including 79% from coal and 3.1% 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.

One of the key initiatives to deliver on this commitment is the Commonwealth Government's *Renewable Energy Target*. Under this target, more than 20% of Australia's electricity would come from renewable energy by 2020. It is estimated that an additional 5,400 MW of new renewable energy capacity will need to be built by 2020 to achieve the *Renewable Energy Target*.

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 Government also has a *Renewable Energy Action Plan*, which promotes the development of renewable energy in NSW.

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

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

The Guideline also acknowledges that large scale solar projects could help 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 nine major operational projects and an additional six 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. The identified energy zones are aimed at encouraging "investment in new electricity infrastructure and unlocking additional generation capacity in order to ensure secure and reliable energy in NSW". The project would be located within one of the five Solar Energy Zones. With a capacity of 200 MW, the project would generate enough electricity to power over 74,800 homes, and is therefore consistent with both the Commonwealth's *Renewable Energy Target* and NSW's *Renewable Energy Action Plan*.



## 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 11 October 2017, the Executive Director, Energy and Resources, may determine



the development application as Council did not object, there were no objections from the general public and a political disclosure statement has not been made.

### 3.2 Permissibility

The site is located wholly within land zoned RU1 Primary Production under the Narrandera LEP, which is discussed further in **section 5.1**. 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.

### 3.3 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 F**).

The project does not currently need to obtain approval from the Commonwealth Minister for the Environment and Energy under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) as surveys undertaken to date have not identified any significant impacts on matters of national environmental significance listed under the EPBC Act. This matter is discussed further in **section 5.3**.

### 3.4 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 RES's consideration of environmental planning instruments in its EIS, as summarised in **section 5** of this report. The Department has considered relevant provisions of the environmental planning instruments in **Appendix C**.



## 4. Engagement

### 4.1 Department's Engagement

The Department publicly exhibited the EIS from 2 August 2018 until 31 August 2018, advertised the exhibition in the *Narrandera Argus* and *Griffith Area News*, and notified adjoining landowners adjacent to the project boundary.

The Department also consulted with Council and the relevant government agencies throughout the assessment and inspected the site on 14 March 2018.

The Department notified and sought comment from TransGrid and RMS in accordance with the Infrastructure SEPP and this is discussed further in **section 4.3** of this report.

### 4.2 Submissions and Submissions Report

During the exhibition of the EIS, the Department received advice from 10 government agencies, including Narrandera Shire Council. No submissions were received from the general public or special interest groups.

Full copies of the agency advice are attached in **Appendix D**. RES provided a response to all matters raised in submissions on the project (see **Appendix E**).

### 4.3 Key Issues – Government Agencies

**Narrandera Shire Council** supports the project, but initially raised concerns about construction traffic, water supply, amenity impacts (noise, dust and visual), waste management and potential impacts on local infrastructure and services. Council recommended specific road upgrades and requested that RES pay annual development contributions (see **sections 5.2** and **5.4** of this report for further discussion). All matters raised by Council were addressed by RES in a revised Submissions Report. The Department has also recommended a range of conditions of consent to address these issues, which are discussed in **section 5**. Council has confirmed it supports the recommended conditions.

The **Office of Environment and Heritage** (OEH) initially raised concerns about the adequacy of the Aboriginal Cultural Heritage Assessment Report (ACHAR) and Biodiversity Development Assessment Report (BDAR). OEH requested that RES address inconsistencies and errors in the ACHAR and prepare an Unexpected Finds Protocol. OEH also requested more information about potential impacts on threatened species and the location of vegetation along Sandigo Road and Muntz Road. RES revised the ACHAR and BDAR for the project accordingly, and OEH advised that it has no objection to the project, subject to the recommended conditions of consent, as discussed further in **sections 5.3** and **5.4**.

The **Department of Industry – Lands and Water (DoI - L&W)** requested additional information about potential cumulative impacts on agricultural land, water supply and erosion and sediment control. DoI - L&W also recommended that RES close a section of an unnamed Crown Road and transfer control of Muntz Road (a Crown road) to Council. RES addressed these matters in the Submissions Report, including confirmation that the unnamed Crown road is not located within the proposed site and that the entirety of Muntz Road is already owned and maintained by Council. The Department has addressed the remaining issues in **sections 5.1** and **5.4** and has recommended a range of conditions of consent where appropriate, and DoI - L&W confirmed it has no remaining concerns.

**Roads and Maritime Services** (RMS) recommended that RES prepare a comprehensive Traffic Management Plan and undertake the relevant road upgrades prior to construction. These recommendations are discussed in **section 5.2** and have been incorporated into the recommended conditions of consent.

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

The **Division of Resources and Geoscience** (DRG) confirmed it is satisfied that the project would not sterilise any mineral resources.

The **Riverina Local Land Services**, **SafeWork NSW** and **TransGrid** raised no concerns about the project and made no recommendations.



## 5. Assessment

The Department has undertaken a comprehensive assessment of the merits of the project. This report provides a detailed discussion of the three key issues, namely land use compatibility, construction traffic and impacts on biodiversity.

The key constraints for the project are shown in **Figure 2**. 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 Compatibility of the Proposed Land Use

#### Provisions of the Narrandera LEP

The site is located wholly within the RU1 Primary Production zone under the LEP. As discussed in **section 3.1** above, 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.

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

Secondly, the project is not inconsistent with the objectives of the RU1 zone, particularly in relation to:

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

While the Narrandera Shire LGA has traditionally relied upon agriculture, the introduction of solar energy generation would contribute to a more diverse local industry, thereby supporting the local economy and community. In addition, the proposed solar farm would encourage renewable energy development which is consistent with the *Narrandera Shire Economic Development Strategy 2017-2020*.

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

The development would not fragment or alienate resource lands in the LGA, as the land could be easily returned to agricultural land following decommissioning and, therefore, the impact is temporary in nature as the inherent agricultural capability of the land would not be affected.



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

### Potential Impacts on Agricultural Land

The project is located within the Riverina Murray region, which makes the largest regional contribution to agricultural production in NSW, with over 9.1 million ha of the region being used for agricultural output.

While the development footprint (550 ha) does not include any mapped Biophysical Strategic Agricultural Land (BSAL), the soils are classified as having Class 3 High Land Capability under the *Land and Soil Capability Mapping in NSW* (OEHL, 2017). As such, the land is capable of sustaining cultivation on a rotational basis and the site is currently used for cropping and grazing. The development of the solar farm would therefore reduce the agricultural output of the site while the solar farm remains operational.

The development footprint of the project combined with the other approved and/or operational SSD solar farms in the Riverina Murray region would be 6,860 ha. However, the loss of 6,860 ha of agricultural land represents a very small fraction (0.07 %) of the 9.1 million ha of land being used for agricultural output in the Riverina Murray region<sup>1</sup> and would result in a negligible reduction in the overall productivity of the region.

The Department also notes that neither Council nor DoL – L&W raised concerns about the impacts of the project on agricultural land.

Furthermore, the inherent agricultural capability of the land would not be affected by the project due to the relatively low scale of the development. To this end, the land would be returned to agricultural use following decommissioning.

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

- the broader strategic goals of the Commonwealth and NSW governments for the development of renewable energy into the future;
- the 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.

RES proposes to return the land back to existing levels of agricultural capability and 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.

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

## 5.2 Traffic and Transport

### Transport Route and Site Access

All development related vehicles would access the site via the Sturt Highway, Sandigo Road, Muntz Road and a new access point from Muntz Road (see **Figure 4**).

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<sup>1</sup> Riverina Murray Agricultural Industries Final Report, Department of Planning and Environment, January 2016.

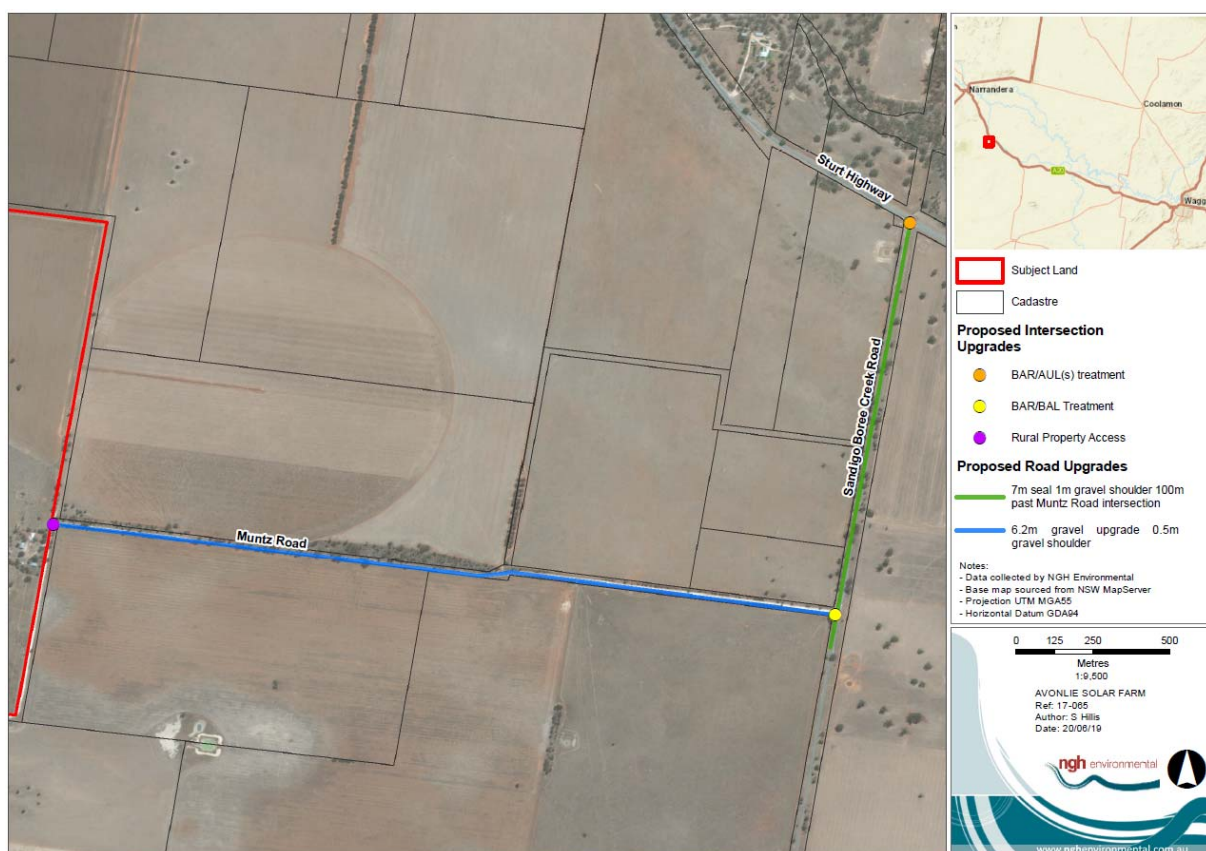
The Sturt Highway is a State road that serves as a key transport route for traffic travelling to local, regional and interstate locations. Sandigo Road (sealed) and Muntz Road (unsealed) are both local roads typically used by local traffic. The Sturt Highway and Sandigo Road are designated for use by B-doubles.

### Traffic Volumes

The main increase in project related traffic would occur during the 18 month construction period, with a peak period of three months. The estimated peak daily vehicle movements would be 35 heavy vehicles and 150 light vehicles. Additionally, there would be a total of 3 over-dimensional vehicles during construction.

The Department notes that the estimated number of light vehicles is very conservative as RES has committed to use a shuttle bus service to transport workers to and from the site to reduce light vehicle numbers. The Department has included a requirement within the Traffic Management Plan (TMP) in the recommended conditions for RES to develop measures to encourage employee use of this service, which is supported by RMS and Council.

Traffic generation during operations would be negligible (i.e. up to 8 light vehicles and 2 medium vehicles [8.8 m in length] per day).



**Figure 4** | Access route and road upgrades

### Road Upgrades and Maintenance

The RMS and Council support the proposed transport route, provided the required road upgrades are undertaken to support the increased traffic.

These include the following:

- upgrade the intersection of the Sturt Highway and Sandigo Road, including Basic Right Turn and Auxiliary Left Turn – short treatments;
- upgrade the intersection of Sandigo Road and Muntz Road, including Basic Right Turn and Basic Left Turn treatments;

- upgrade Sandigo Road from the Sturt Highway to 100 m past Muntz Road, including sealing to a width of 7 m;
- upgrade Muntz Road between Sandigo Road and the site access point, including a gravel surface to a width of 6.2 m; and
- design the site access point off Muntz Road with a Rural Property Access type treatment to cater for the largest vehicle accessing the site.

Following an iterative design process undertaken in consultation with the Department, Council and OEH, RES has accepted the proposed upgrades and has confirmed the upgrades would be designed and constructed to the satisfaction of the relevant roads authority. The Department notes that the presence of high quality vegetation within the road reserve was a factor constraining the road design, and that the final design would meet the relevant Austroads Standards and minimise vegetation clearance (see **section 5.3**).

Additionally, RES has committed to preparing road dilapidation surveys and repairing any damage resulting from the construction traffic.

### **Recommended Conditions**

The Department has recommended conditions of consent requiring RES 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 in the EIS;
- ensure the length of vehicles (excluding over-dimensional vehicles) does not exceed 19 m; and
- prepare a Traffic Management Plan in consultation with RMS and Council, including provisions for dilapidation surveys, details of the measures that would be implemented to address road safety and details of the employee shuttle bus service.

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

## **5.3 Biodiversity**

### **Avoidance and Mitigation**

The site is mostly comprised of cleared agricultural land. However, approximately 80 ha of native vegetation is distributed in patches throughout the site and along Muntz Road and Sandigo Road.

RES has designed the project to avoid native vegetation in the southwest and southeast corners of the site and along fence lines centrally within the site (see **Figure 2**). RES has also designed the road upgrades in consultation with OEH to ensure that vegetation within the road reserve would be avoided to the greatest extent possible. Disturbance would largely be limited to the existing disturbed footprint of the existing roads and table drains.

### **Vegetation Clearing**

In total, the project would disturb 2.8 ha of native vegetation, including:

- 1.9 ha of Western Grey Box – White Cypress Pine tall woodland (PCT 80), an endangered ecological community (EEC) under the *Biodiversity Conservation Act 2016* (BC Act) (1.6 ha is located in the road reserve, 0.3 ha is located within the site);
- 0.9 ha of planted Old Man Saltbush – mixed chenopod shrubland (PCT 158) (located within the site); and
- 49 paddock trees classified as Western Grey Box – White Cypress Pine tall woodland (PCT 80) (located within the site).

### **Threatened Species**

Seventeen threatened fauna species listed under the BC Act are predicted to use habitat on the site and within the road reserve.



Field surveys were required for two fauna species (Superb Parrot and Major Mitchell Cockatoo) and four flora species (Sand-hill Spider Orchid, Oaklands Diuris, Pine Donkey Orchid and Spear Grass). However, seasonal conditions prevented confirmation of their presence and it was therefore assumed that these species would be impacted.

The Sand-hill Spider Orchid and Oaklands Diuris are also listed as potential serious and irreversible impact (SAIL) entities under the Biodiversity Assessment Methodology (BAM). The Department notes that RES designed the road upgrades to largely avoid habitat associated with SAIL entities within the road reserve. As such, based on the small area of potential habitat to be impacted (1.6 ha), and suitable remaining habitat nearby (6.6 ha), it was considered unlikely that the proposal would have a serious and irreversible impact on these species.

### **Commonwealth Listed Species**

Approximately 1.6 ha of the Western Grey Box woodland (PCT 80) is listed under the EPBC Act. No EPBC Act listed species were recorded onsite, however five species were considered to potentially occur, including three fauna species (Swift Parrot, Superb Parrot and Corben's Long Eared Bat) and two flora species (Sandhill Spider Orchid and A Spear Grass).

Assessments of significance under the EPBC Act concluded that the clearance of a small portion of Western Grey Box woodland and fauna habitat would not constitute a significant impact.

RES would undertake additional surveys prior to commencing construction to confirm the presence of two the flora species (as seasonal conditions prevented confirmation). If detected, further assessment may be required under the EPBC Act.

### **Offsets**

The impact on native vegetation and native species would generate 98 ecosystem credits and 195 species credits under the BC Act, including the credits for the species that were assumed to be present. The final credit requirement would be retired in accordance with the *NSW Biodiversity Offset Scheme*.

RES may undertake additional surveys to verify the presence of the threatened species (as seasonal conditions prevented confirmation during the field surveys), and may seek to revise the species credit requirements. The Department and OEH accept that it is reasonable for the species credit offset requirement to be revised in consultation with OEH and to the satisfaction of the Secretary, provided there is sufficient justification to do so.

### **Conclusion**

The Department has recommended conditions requiring RES to:

- retire the applicable biodiversity offset credits in accordance with the Biodiversity Offsets Scheme; and
- prepare and implement a Biodiversity Management Plan in consultation with OEH, including measures to protect and manage vegetation and fauna habitat outside the approved disturbance area.

With these measures, both OEH and the Department consider that the project is unlikely to result in a significant impact on the biodiversity values of the locality.

## **5.4 Other Issues**

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

**Table 3** | Other Issues

Issue	Findings	Recommended Condition
Heritage	<ul style="list-style-type: none"> <li>Site surveys identified four artefact scatters (AS1, AS2, AS3 and AS4), 64 isolated finds and two scarred trees. All items were assessed to be of low significance, with the exception of AS1 (low to moderate significance) and the Scarred Tree 1 (high significance).</li> <li>The development footprint has been designed with exclusion zones to avoid impacting artefact scatters AS3, AS4 and the majority of AS1, two of the isolated finds and both scarred trees.</li> <li>RES has committed to salvage and relocate the remaining items (including AS2, 62 isolated finds and the remainder of AS1).</li> <li>If Aboriginal artefacts or skeletal material are identified, all work would cease, and an unexpected finds procedure would be implemented.</li> <li>There are no known items of historic heritage value within or surrounding the site.</li> <li>With these measures, the Department and OEH consider that the project would not significantly impact the heritage values of the locality.</li> </ul>	<ul style="list-style-type: none"> <li>Ensure the development does not cause any direct or indirect impacts on any items located within exclusion zones or outside the approved development footprint.</li> <li>Salvage and relocate Aboriginal items to suitable alternative locations.</li> <li>Prepare and implement a Heritage Management Plan in consultation with OEH and Aboriginal Stakeholders, including procedures for unexpected finds.</li> </ul>
Visual	<ul style="list-style-type: none"> <li>The solar panels would be up to 4 m high, and the maintenance building, substation and battery storage facility would be a similar size to agricultural sheds commonly utilised in the local area.</li> <li>Seven dwellings are located within 2 km of the site, six of these are associated with the project.</li> <li>The closest non-associated dwelling is about 1.8 km west of the site. Distance and existing vegetation would largely screen views of the project from this dwelling, resulting in a low visual impact.</li> <li>With the exception of Muntz Road, the visual impact at all other assessed locations (i.e. roads and dwellings) would be low or nil due to distance and existing vegetation.</li> <li>Nonetheless, RES has committed to implement measures to minimise the visual impact of the project, including retaining existing vegetation located along fence lines and road reserves, avoiding unnecessary lighting and signage and ensuring the visual appearance of infrastructure (including paint colours) blends in as far as possible with the surrounding landscape.</li> <li>Neither Council nor RMS raised concerns about visual impacts to motorists using the Sturt Highway or local roads.</li> <li>The photovoltaic panels are designed to absorb rather than reflect sunlight, and the Department is satisfied that the project would not cause noticeable glint or glare compared to other building surfaces.</li> <li>The Department considers the visual impact of the project on the surrounding residences and road users to be minimal.</li> </ul>	<ul style="list-style-type: none"> <li>Ensure that external lighting is minimised and complies with the relevant Australian Standards.</li> <li>Prohibit any signage or advertising on the site, unless it is for safety purposes.</li> </ul>
Noise	<ul style="list-style-type: none"> <li>Noise generated by the proposed construction, upgrading and decommissioning activities was predicted to be 36dB(A) at the closest non-associated receiver (R9) and less than 35dB(A) at all other non-associated receivers, and therefore would be well below the 'noise affected' criterion of 45 dB(A) in the EPA's <i>Interim Construction Noise Guideline</i> (ICNG) at all non-associated residences.</li> <li>Notwithstanding, RES has committed to implement the noise mitigation work practices set out in the ICNG, including scheduling activities to minimise noise, using quieter equipment and establishing a complaint handling procedure.</li> <li>There would be negligible noise during operation.</li> </ul>	<ul style="list-style-type: none"> <li>Minimise the noise generated by construction, upgrading or decommissioning activities on site in accordance with best practice requirements outlined in the ICNG.</li> <li>Restrict construction to the standard hours in the ICNG (i.e. Monday to Friday 7 am to 6 pm, and Saturday 8 am to 1 pm).</li> </ul>

Issue	Findings	Recommended Condition
Water and Erosion	<ul style="list-style-type: none"> <li>The project would require around 12 megalitres (ML) of water during construction (mainly for dust suppression) and 1.7 ML of water annually during operation. A static water supply (20,000 litres) would also be established and maintained for fire protection.</li> <li>Water would be trucked to site and sourced from on-site farm dams in accordance with harvestable rights. Council has confirmed that a viable water source is available through a stand pipe at Narrandera.</li> <li>Any erosion and sedimentation risks associated with the project can be effectively managed using best practice construction techniques.</li> <li>The project is not expected to affect groundwater resources.</li> </ul>	<ul style="list-style-type: none"> <li>Prohibit water pollution in accordance with Section 120 of the <i>Protection of the Environment Operations Act 1997</i>.</li> </ul>
Battery storage facility	<ul style="list-style-type: none"> <li>RES is proposing an on-site lithium-ion battery storage facility with an initial capacity of 10 MW/10 MWh. RES intends to increase the battery storage capacity to 205 MW/ 205 MWh in the future, which would require a new application / modification and further assessment.</li> <li>The Department has recommended a condition limiting the battery storage facility to 10 MW/10 MWh. This would not prevent RES from seeking to modify the project to increase the capacity of the battery storage system in the future.</li> <li>The proposed battery storage facility would be located adjacent to the construction compound (see <b>Figure 2</b>) and approximately 1.4 km southwest of the nearest residence.</li> <li>The preliminary risk screening included in the EIS was undertaken in accordance with <i>SEPP No.33 – Hazardous and Offensive Development</i> and determined that a Preliminary Hazard Assessment was not required for the proposed capacity of 10 MW/10 MWh.</li> <li>RES would implement a range of hazard prevention and mitigation measures including (but not limited to): <ul style="list-style-type: none"> <li>a 10 m Asset Protection Zone (APZ) around the battery storage facility;</li> <li>automated monitoring and control systems, with alarm and shutdown capability; and</li> <li>appropriate separation between battery cubicles / containers.</li> </ul> </li> <li>Subject to the recommended conditions, the Department is satisfied that risks associated with the facility would be negligible.</li> </ul>	<ul style="list-style-type: none"> <li>Limit the capacity of the battery storage facility to 10 MW/10 MWh.</li> <li>Prepare a Fire Safety Study consistent with the Department's <i>Hazardous Industry Advisory Paper No. 2, 'Fire Safety Study'</i> guideline and the <i>'Best Practice Guidelines for Contaminated Water Retention and Treatment Systems'</i>.</li> <li>Prepare an Emergency Plan consistent with the Department's <i>Hazardous Industry Advisory Paper No. 1</i>.</li> </ul>
Other hazards	<ul style="list-style-type: none"> <li>The project would comply with the International Commission on Non-Ionizing Radiation Protection (ICNIRP) guidelines for electric, magnetic and electromagnetic fields.</li> <li>The site is not mapped as bushfire prone land. Notwithstanding, RES has committed to managing the entire site as an Asset Protection Zone and preparing a fire management plan and Emergency Plan to manage fire risk.</li> <li>The Applicant intends to manage ground cover and its associated fire hazard on site by using sheep grazing.</li> <li>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 Fire and Rescue NSW.</li> <li>There are no natural watercourses within the site and the site is not mapped as flood prone under the Narrandera LEP (2013). Further, DoI – L&amp;W, OEH and Council raised no concerns about flooding.</li> </ul>	<ul style="list-style-type: none"> <li>Ensure that the development complies with the relevant asset protection requirements in the RFS's <i>Planning for Bushfire Protection 2006</i>.</li> <li>Prepare an Emergency Plan in consultation with RFS and Fire and Rescue NSW.</li> <li>Undertake activities in accordance with OEH's <i>Managing Urban Stormwater: Soils and Construction</i> (Landcom, 2004) manual and <i>Guidelines for Controlled Activities on Waterfront Land</i> (DPI Water, 2018).</li> <li>Prepare and implement a Stormwater Management Plan.</li> </ul>

Issue	Findings	Recommended Condition
	<ul style="list-style-type: none"> <li>However, during extreme rainfall events the irrigation channel located along the eastern site boundary would act as a floodway and the two onsite farm dams would store stormwater. RES has committed to preserve the irrigation channel and farm dams and to prepare a Stormwater Management Plan.</li> </ul>	
Workforce accommodation	<ul style="list-style-type: none"> <li>Up to 200 workers would be required during the construction period and would be sourced from the local community where possible.</li> <li>There is the potential for construction of the project to overlap with the construction of Sandigo Solar Farm, Yarrabee Solar Farm and the proposed Yanco Solar Farm (should it be approved). Should this occur, up to 800 construction personnel may be required in the region. However, the Department considers that it is unlikely the entire construction periods of these three projects would overlap, and notes that the construction of Yarrabee Solar Farm may be staged.</li> <li>In addition to Narrandera, the nearby towns of Leeton and the regional centres of Griffith and Wagga Wagga (between 30 and 100 km from the site) would provide a source of workers and accommodation options.</li> <li>Council requested that an accommodation and employment strategy be prepared in consultation with Council for the project.</li> <li>While the Department considers there to be sufficient workers accommodation available for this project, to manage the potential cumulative impacts associated with multiple projects in the region, RES would be required to develop an Accommodation and Employment Strategy. The Strategy would require RES to: <ul style="list-style-type: none"> <li>propose a strategy to ensure there is sufficient accommodation for the workforce associated with the project;</li> <li>consider cumulative impacts with other projects in the area;</li> <li>prioritise employment of local workers; and</li> <li>monitor and review the effectiveness of the strategy, including regular monitoring during construction.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Prepare an Accommodation and Employment Strategy for the project in consultation with Council, with consideration of the cumulative impacts associated with other State significant development projects in the area.</li> </ul>
Subdivision	<ul style="list-style-type: none"> <li>RES proposes to subdivide Lot 30 DP754538 to create two new lots, including: <ul style="list-style-type: none"> <li>a 1 ha lot for the substation; and</li> <li>a 48.4 ha lot to be retained by the existing landowner for agricultural purposes consistent with the current use.</li> </ul> </li> <li>The residual area would be 212.6 ha and used for the proposed solar farm infrastructure.</li> <li>The subdivided lots would be below the minimum lot size of 400 ha and are prohibited under a strict reading of the LEP.</li> <li>Notwithstanding, under Section 4.38(3) of the EP&amp;A Act, development consent for the project as a whole can be granted despite the subdivision component of the application being prohibited by the LEP.</li> <li>The Department is satisfied that the subdivision should be approved as it: <ul style="list-style-type: none"> <li>is necessary for the operation of the substation;</li> <li>would permit existing agricultural land uses to continue on land that is not required for the development;</li> <li>would not result any additional dwelling entitlements on the subdivided lots; and</li> <li>is consistent with the key objectives of the RU1 zone as it would encourage diversity and primary industry enterprises and minimise conflict between land uses.</li> </ul> </li> <li>Further, Council has not objected to the proposed subdivision.</li> </ul>	<ul style="list-style-type: none"> <li>Subdivide the proposed lots in accordance with requirements of section 157 of the <i>Environmental Planning and Assessment Regulation 2000</i>.</li> </ul>



Issue	Findings	Recommended Condition
Community contributions	<ul style="list-style-type: none"> <li>The Department considered the need for developer contributions in its assessment of this project and whether it would create any additional demand on public services and infrastructure.</li> <li>The assessment found that the only material additional demand on services and infrastructure related to roads.</li> <li>As such, the Department has recommended strict conditions of consent that would require RES to pay for all relevant road and intersection upgrades. Further, RES would be required to pay for the repairs of any project-related impacts on the road network. These conditions have been agreed with the Applicant and Council.</li> <li>The Department also considered the demand created by the construction workforce (up to 200 workers). As noted above, to ensure there would be sufficient existing accommodation to house construction workers, RES would be required to develop an Accommodation and Employment Strategy in consultation with Council. This condition is supported by Council.</li> <li>Given the relatively low level of employment generated once it is operational (approximately 4 workers), the project is unlikely to result in significant additional demand on community services and infrastructure during the operational stage of the project.</li> <li>It is noted that Council has a Section 94A Development Contributions Plan. While the Contributions Plan is a relevant matter for consideration by the consent authority, it is not binding on State significant developments. Further, as outlined above, the Department has considered the demand on public services and infrastructure and is satisfied that its recommended conditions address the only material impact of the project on these matters (i.e. roads). Consequently, the Department does not consider that a Section 7.12 levy is either necessary or warranted in this case.</li> <li>Nonetheless, RES has committed to pay a one-off payment of \$250,000 into a community fund held by Council for community enhancement at the commencement of construction. The funding of this payment would be administered by RES and Council. Council has confirmed that it supports this approach.</li> </ul>	<ul style="list-style-type: none"> <li>No specific conditions required.</li> </ul>



## 6. Recommended Conditions

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

The Department consulted with RES and the relevant agencies on the conditions for the project, particularly Council and RMS in regard to the road upgrades and maintenance requirements, and OEH to determine the appropriate biodiversity offset requirements for the project.

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, biodiversity, heritage, amenity, water and bushfire impacts, and required the following management plans be prepared and implemented:

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

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

Other key recommended conditions include:

- *biodiversity offsets* – retiring biodiversity offset credits in accordance with the NSW Biodiversity Offsets Scheme;
- *roads* – requiring relevant road upgrades are undertaken prior to the commencement of construction;
- *fire* - ensure that the development complies with the relevant asset protection requirements in the RFS's *Planning for Bushfire Protection 2006*; and
- *accommodation and employment* – requiring an accommodation and employment strategy be prepared and implemented to ensure there would be sufficient accommodation to house construction workers, and to prioritise the employment of local workers.



## 7. Evaluation

The Department has assessed the development application, EIS, submissions, amended development application and Submissions Report provided by RES and 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 close proximity to the Sturt Highway and has direct access to the electricity network via two TransGrid transmission lines which traverse the site. The site is in a rural area, with the nearest non-associated dwelling located about 1.8 km 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. None of the surrounding landowners provided comments or objected to the project. Views from surrounding residences and roads would mostly be screened by existing vegetation and distance to the nearest non-associated dwellings.

The project has also been designed to largely avoid key constraints, including remnant native vegetation, Aboriginal heritage items and an irrigation channel. Any residual impacts would be minor and can be managed through the recommended conditions of consent.

Notably, the Applicant revised its proposed road upgrades following advice from the Council and OEH, and this has led to better road safety outcomes and a reduction in native vegetation disturbance within the road reserve.

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, the site could be returned to agricultural uses after the project is decommissioned and the inherent agricultural capability of the land would not be affected.

To address the residual impacts of the project, the Department has recommended a range of detailed conditions, developed in conjunction with agencies and Council, to ensure these impacts are effectively minimised or offset. RES 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 over 441,500 MWh of clean electricity annually, which is enough to power over 74,800 homes and save over 423,800 tonnes of greenhouse gas emissions per year. It is therefore consistent with the goals of the Commonwealth's *Renewable Energy Target* and NSW's *Renewable Energy Action Plan*.

Further, the project includes an energy storage facility that would enable the project to store solar energy for dispatch to the grid, which would 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 believes that the project is in the public interest and should be approved, subject to the recommended conditions of consent.



## 8. Recommendation

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

- **considers** the findings and recommendations of this report; and
- **accepts** and **adopts** all of the findings and recommendations in this report as the reasons for making the decision to grant consent to the application;
- **agrees** with the key reasons for approval listed in the notice of decision;
- **grants consent** to the application in respect of the Avonlie Solar Farm (SSD 9031); and
- **signs** the attached development consent and recommended conditions of consent (see **Appendix F**).

Recommended by:

2/8/19

**Iwan Davies**

A/Team Leader

Energy Assessments

Recommended by:

2/8/19

**Nicole Brewer**

A/Director

Energy Assessments



## 9. Determination

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

*Michael J. Young* 8/8/19.

**Mike Young**

A/Executive Director

Energy and Resources





## *Appendices*

## **Appendix A – List of Documents**

Avonlie Solar Farm Environmental Impact Statement, NGH, 2018

Avonlie Solar Farm Amended Development Application, RES, 2019

Avonlie Solar Farm Submissions Report, NGH, 2019

## Appendix B – Environmental Impact Statement

See the Department's website at:

[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=9031](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=9031)

## Appendix C – 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
<i>Objects of the EP&amp;A Act</i>	<p>The objects of most relevance to the Minister’s decision on whether or not to approve the project are found in Section 1.3(a), (b), (c), (e) and (f) of the EP&amp;A Act.</p> <p>The Department is satisfied that the project encourages the proper development of natural resources (Object 1.3(a)) and the promotion of orderly and economic use of land (Object 5(c)), particularly as the project is:</p> <ul style="list-style-type: none"><li>• a permissible land use on the subject land;</li><li>• located in a logical location for efficient solar energy development;</li><li>• 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; and</li><li>• consistent with the goals of the Renewable Energy Action Plan and would assist in meeting Australia’s renewable energy targets whilst reducing greenhouse gas emissions.</li></ul> <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. RES 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 <b>section 5</b> of this report. Following its consideration, the Department considers that the project is able to be undertaken in a manner that would improve or at least maintain the biodiversity values of the locality over the medium to long term and would not significantly impact threatened species and ecological communities of the locality. The Department is also satisfied that any residual biodiversity impacts can be managed and/or mitigated by imposing appropriate conditions and retiring the required biodiversity offset credits.</p> <p>Consideration of the sustainable management of built and cultural heritage (Object 1.3(f)) is provided in <b>section 5.4</b> of this report. Following its consideration, the Department considers the project would not significantly impact the built or cultural heritage of the locality. The Department satisfied that any residual impacts on heritage can be managed and/or mitigated by imposing appropriate conditions.</p>



Aspect	Summary
<i>State Significant Development</i>	<p>Under Section 4.38 of the EP&amp;A Act the project is considered a State Significant Development.</p> <p>The Minister for Planning is the consent authority for the development.</p> <p>Under the Minister's delegation of 11 October 2017, the Executive Director, Energy and Resource Assessments, may determine the project.</p>
<i>Environmental Planning Instruments</i>	<p>The <i>Narrandera Local Environment Plan (LEP) 2013</i> applies and is discussed in <b>sections 2.1, 3.2, 5.1</b> and <b>5.4</b> of this report, particularly regarding permissibility, land use zoning, flooding and subdivision.</p> <p>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 as the electricity supply authority for the area.</p> <p>RES completed a preliminary risk screening in accordance with <i>SEPP No. 33 – Hazardous and Offensive Development</i>, while the screening determined that a Preliminary Hazard Assessment was not required. The Department's consideration of this analysis is discussed in <b>section 5.4</b>.</p> <p>The Department has considered the provisions of the <i>State Environmental Planning Policy (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 <b>section 5.1</b> of this report.</p> <p>The Department has considered the provisions of <i>SEPP No. 44 – Koala Habitat Protection</i>. There are patches of remnant woodland on and around the site which contain trees that would be considered suitable habitat for koala. No koalas (or signs of koalas) were identified during targeted surveys. Due to a lack of recent koala sightings, low numbers of koala records within the locality and the fragmented nature of potential koala habitat within and surrounding the site, the project is not considered to constitute core koala habitat. As such, the Department is satisfied that the project is consistent with the aims, objectives and requirements of SEPP 44.</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>

## Appendix D – Submissions

See the Department's website at:

[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=9031](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=9031)

## Appendix E – Amended Development Application and Submissions Report

See the Department's website at:

[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=9031](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=9031)

## Appendix F – Recommended Conditions of Consent

See the Department's website at:

[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=9031](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=9031)