STATE SIGNIFICANT DEVELOPMENT ASSESSMENT
Tarleigh Park Solar Project (SSD 8436)

EXECUTIVE SUMMARY

RES Australia proposes to develop a new 90 megawatt solar farm near Deniliquin in the southwest of NSW.

The Department publicly exhibited the development application and received submissions from eight Government agencies and 23 members of the general public. None of the government agencies objected to the project, however twenty of the public submissions were objections. The key concerns raised in objections and considered in the Department's assessment are agricultural land and amenity impacts.

The Department considers that the project would not significantly reduce the overall agricultural productivity of the region, nor would it inhibit the use of irrigation infrastructure on other sites within the region. Further, the Department is satisfied that the project would not affect the future use of the site's irrigation channels, and the site could be returned to agricultural uses in the future.

In relation to amenity impacts, the Department notes that a vegetation buffer would be established that would effectively screen views of the project and mitigate visual impacts from residences. The potential noise and traffic impacts would be short-term, relatively minor in nature and could be managed in accordance with strict conditions on construction hours, road upgrades, and a comprehensive Traffic Management Plan.

In summary, the Department considers the site to be suitable for a large-scale solar farm as it has good solar resources, has been cleared for agricultural purposes and is close to the existing electricity network. The project is consistent with both the Commonwealth's *Renewable Energy Target* and NSW's *Climate Change Policy Framework* as it would contribute 90 MW of renewable energy to the National Electricity Market, and increase the diversity of supply. 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.

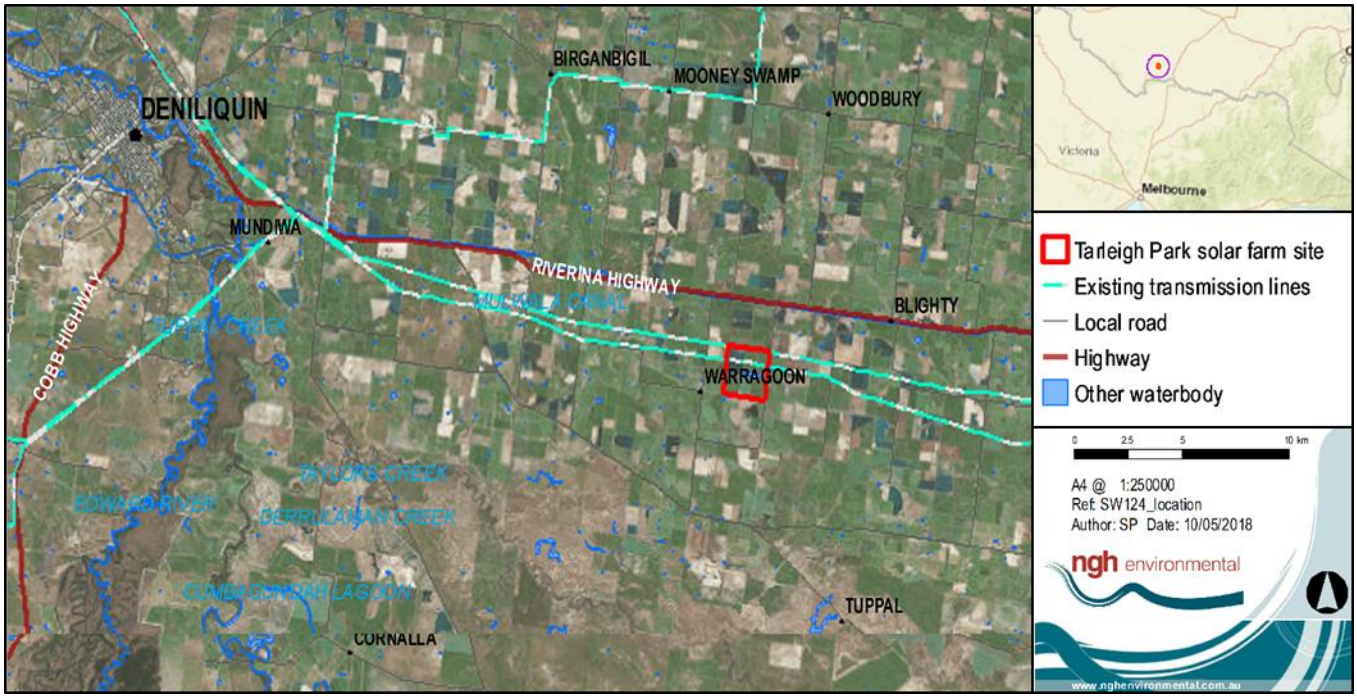

Figure 1: *Regional Context*

1. BACKGROUND

RES Australia (the Applicant) proposes to develop a new 90 megawatt (MW) solar farm approximately 23 kilometres (km) east of Deniliquin, in the Edward River local government area (see **Figure 1**).

1.1 Project setting

The project is located on a 250 hectare (ha) site off Parfreys Road. A 132 kilovolt transmission line passes through the site.

The site is relatively flat and has been largely cleared for agricultural purposes. It is currently used for irrigation cropping and grazing and comprises a network of irrigation and drainage channels, and a large farm dam. The site is located in the NSW Murray basin and the Murray River is approximately 25 km south of the site.

The proposed development footprint within the site is 173 ha and has been designed to avoid site constraints including remnant vegetation. The nearest residence is located approximately 1 km south west of the site, and there are seven residences located within 2 km of the project.

1.2 Project description

The project involves the construction of a new solar farm with a generating capacity of 90 MW and a battery storage capacity of 16 MW hours. It also involves any upgrading or decommissioning of infrastructure and equipment in the future. While the capacity of the proposed solar farm may increase over time as technology improves, the footprint of the development would not increase.

Key components of the project are summarised in **Table 1,** depicted in **Figure 2** and described in detail in the environmental impact statement (EIS) for the project (see **Appendix B**).

Table 1: *Major components of the project*

Aspect	***Description***
Project summary	The project includes: • approximately 243,200 solar panels (up to 3 m in height) and approximately 16 inverter stations (up to 3 m in height); • a lithium-ion battery storage facility with up to 8 housing containers (up to 3 m in height); • an onsite substation directly connected into the existing TransGrid 132kV overhead transmission line; • internal access tracks, staff amenities, permanent site office, car parking, laydown area and security fencing; and • vegetation screening along Parfreys Road and sections of the north and south boundary.
Project area	250 ha (with a 173 ha development footprint)
Site entry	The entry point would be off Parfreys Road.
Road upgrades	Construction of a new intersection between the Riverina Highway and Parfreys Road.
Operational life	• The expected operational life of the initial infrastructure is 30 years. However, the project may involve infrastructure upgrades that could extend the operational life. • The project also includes decommissioning at the end of the project life, which would involve removing all above ground infrastructure and underground infrastructure.
Construction traffic and timeframe	• The total construction period would last for approximately 12 months, and would comprise: - a peak traffic period of approximately 2 months (approximately 254 light and 46 heavy vehicle movements a day, including over dimensional vehicles); and - a non-peak traffic period of approximately 10 months (approximately 84 light and 5 heavy vehicle movements a day, including over dimensional vehicles). • Construction hours would be limited to Monday to Friday 7 am - 6 pm, and Saturday 8 am - 1 pm.
Hours of operation	• The solar farm would operate during the day. • Daily operations and maintenance by site staff would be undertaken Monday to Friday 7 am - 6 pm, and Saturday 8 am - 1 pm.
Employment	• Up to 150 full time equivalent workers during the construction period and up to 4 full time equivalent workers during operations.
Capital investment value	$100 million

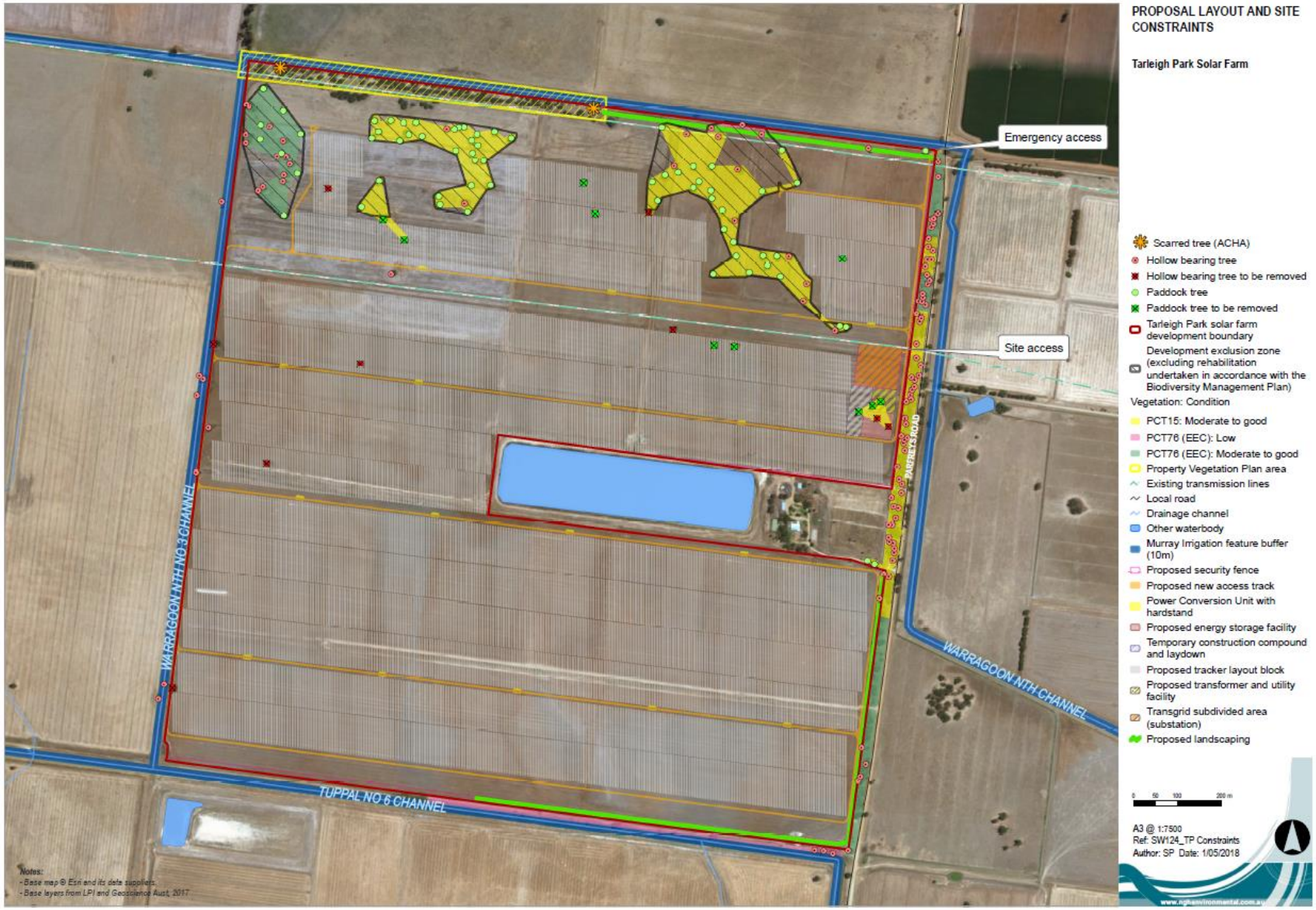

Figure 2: *Project Layout*

1.3 Relationship to proposed Currawarra Solar Project

The project is located approximately 18 km south of the proposed Currawarra Solar Project (SSD 8437), which is a 195 MW capacity solar farm located on a 620 ha site.

As there is uncertainty around the timing of the two projects, the Department has assessed the potential cumulative impacts of both projects on the basis that construction may occur concurrently and both projects may be operational at the same time.

1.4 Strategic Context

In 2016, the vast majority of energy in NSW was derived from fossil fuels, including 80.4% from coal and gas, and only 19.6% was derived from renewable energy sources. 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 recently released *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* (UNFCCC) 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* (RET). Under this target, more than 20% of Australia's electricity would come from renewable energy by 2020. It is estimated that an additional 6,000 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.

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 the proposed South West Energy Zone.

NSW is currently leading Australia in large-scale solar development, with four major operational projects, including one of the largest solar farms in Australia.

With an initial capacity of 90 MW, the project would generate enough power for around 33,500 homes, and is therefore consistent with both the Commonwealth's *Renewable Energy Target* and NSW's *Renewable Energy Action Plan*.

2. STATUTORY CONTEXT

2.1 State significant development

Under the *State Environmental Planning Policy (SEPP) (State and Regional Development) 2011*, the project is classified as State Significant Development as it is an electricity generating activity with a capital investment value of more than $30 million. Therefore, the project is classified as a State Significant Development under Section 4.38 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

Consequently, the Minister for Planning is the consent authority for the development. However, under the Minister's delegation of 11 October 2017, the Executive Director, Resource Assessments and Business Systems, may determine the development application as there were less than 25 objections, Council has not objected and a political donations disclosure statement has not been made.

2.2 Environmental planning instruments

The provisions of the *Conargo Local Environmental Plan (LEP) 2013* are discussed in **section 4.1**.

Under the *SEPP (Infrastructure) 2007*, the project is permissible as it involves development for the purposes of electricity generating works. 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.

In accordance with *SEPP No. 33 – Hazardous and Offensive Development (SEPP No. 33)* the Applicant completed a Preliminary Hazard Analysis for the battery storage facility. The Department's consideration of this analysis is discussed in **section 4.3** of this report.

The Department has considered the provisions of *SEPP No. 55 – Remediation of Land*. A preliminary assessment of the land found no contaminated land within the project site, and the Department is satisfied the site is suitable for the development.

2.3 Other approvals

Under Section 4.41 of the EP&A Act, a number of other approvals are integrated into the SSD approval process, and consequently 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 the intersection works under the *Roads Act 1993*.

The Department has consulted with the relevant government authorities 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 A**).

3. CONSULTATION

The Department publicly exhibited the EIS from 21 November 2017 until 21 December 2017, and received submissions from eight Government agencies and 23 members of the public. A summary of the key issues raised in submissions is provided below. A full copy of the submissions is provided in **Appendix C**.

The Department inspected the site and met with local community members on 4 and 5 December 2017.

The Applicant provided a response to all matters raised in submission on the project (see **Appendix D**), as well as a range of additional information to address matters raised by the Department and other agencies during the assessment process (see **Appendix E).**

3.1 Agency submissions

Edward River Council initially raised concerns about aspects of the project including amenity impacts and workers accommodation.

Council also recommended the Applicant develop a Landscape Management Plan and that conditions be included about the decommissioning of the site. These matters have been addressed by the Applicant in the Response to Submissions and are discussed in **section 4.**

RMS did not object to the proposal provided the Applicant undertakes road upgrades and prepares a Traffic Management Plan, which the Department has incorporated into the recommended conditions of consent.

The **Department of Industry – Lands and Water** (DoI L&W) requested further information on potential impacts to biosecurity, on-site water storages and agricultural land. These matters have been addressed by the Applicant in the Response to Submissions and DoI L&W has no residual concerns.

The **Office of Environment and Heritage** (OEH) initially raised concerns about the biodiversity assessment completed for the project. However, these concerns have been addressed in the Applicant's Response to Submissions and through recommended conditions of consent. OEH has no residual concerns subject to the implementation of the recommended conditions, which are discussed in **section 4.4** below.

Local Lands Services (LLS) acknowledged that biodiversity impacts had been addressed in the EIS and advised it had no further comment.

The **Division of Resources and Geoscience** (DRG) requested evidence of consultation with nearby quarry owners and operators, which was provided in the Applicant's Response to Submissions.

The **NSW Rural Fire Service** (RFS) recommended bushfire management conditions, which have been incorporated into the recommended conditions of consent.

Fire and Rescue NSW (FRNSW) recommended the Applicant develop an Emergency Response Plan including specific risk avoidance and emergency management measures.

3.2 Public submissions

The submissions from the general public comprised of 20 objections to the project and three submissions providing comments on the project. Most of these submissions were from local residents around Blighty and Deniliquin, with two from Victoria and two from southeast New South Wales.

The key issues in these objections related to land use compatibility and the amenity impacts of the project, including visual, noise and traffic. Many people raised concerns that it would sterilise agricultural land that has been enhanced for irrigation. These matters are addressed in **section 4.1** and **4.2** of this report.

Two objections raised general concerns about the broader impacts of large-scale solar farms (and other renewable energy projects) on energy security and pricing. These matters are addressed in **section 4.4** of this report.

4. ASSESSMENT

The Department has undertaken a comprehensive assessment of the merits of the project. This report provides a detailed discussion of three key issues, including potential impacts to agricultural land, amenity impacts (including traffic, noise and visual) and the energy storage facility.

The Department has also considered the full range of potential impacts associated with the project and has included a summary of the conclusions relating to these in **section 4.4**.

4.1 Compatibility of proposed land use

Provisions of the Conargo LEP

The project site is located wholly within the RU1 Primary Production zone under the Conargo LEP. The RU1 zone identifies land uses that are permitted with and without consent. As a solar farm is not expressly listed as permitted with consent or without consent, it would be considered a prohibited land use under a strict reading of the LEP zoning table.

However, based on a broader reading of the LEP, and consideration of the objectives of the RU1 zone and other Council strategic documents, the Department is satisfied that there is no clear intention to prevent the development of a solar farm on the project site.

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

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

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

The proposed development would have limited impacts on the agricultural productivity of the land; the site could be easily returned to agricultural land in the future once the project is decommissioned, and managed grazing could occur during operations. Further, Council does not object to the development of the project subject to the implementation of suitable environmental mitigation measures.

Thirdly, while land use in the Edward River local government area still comprises dryland agriculture and grazing, the region has diversified with the use of irrigation to produce a range of broadacre and horticultural crops. The proposed solar farm would encourage a new element of agricultural enterprise and contribute to a more diverse local industry.

Finally, the project is 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.

Potential impacts on agricultural land

The project site is located in the Murray Irrigation Area of NSW where agriculture is the major economic driver. However, the site is not mapped as Biophysical Strategic Agricultural Land.

The Department acknowledges the project site is located in an established irrigation region, and the site comprises purpose built irrigation infrastructure, such as lateral irrigators, irrigation and drainage channels.

The agricultural output from the site would be reduced by the development of the solar farm, however the land area to be taken up by the solar farm represents a very small fraction of the agricultural output of the Murray Irrigation area. The combined loss of irrigation cropping land from this project and the nearby Currawarra Solar Project would result in a negligible reduction in the overall productivity of the region.

The Department notes the capability of irrigation and drainage channels located on site would be affected during the life of the project, however considers nothing would prevent the future use of these channels following decommissioning of the project. In addition, the Department is satisfied that the project would not impact the use of irrigation and drainage channels for irrigators or landowners located upstream or downstream of the project site.

The Department also notes that portable irrigation infrastructure previously utilised on site, such as lateral irrigators, would be relocated to another area of land that is currently farmed by the host landowner, and therefore the capability of this infrastructure would not be lost.

The region's key irrigation provider, Murray Irrigation Limited, supplies irrigation water to approximately 724,000 ha of agricultural land within southern NSW. The loss of 250 ha of land from the project would result in a negligible reduction (0.04%) in the overall productivity of the Murray Irrigation Area.

Furthermore, the inherent agricultural capability of the land would not be affected by the project due to the relatively low scale of the development. Managed grazing may be used to maintain the height of ground cover during operations and the land would be returned to agricultural use following decommissioning.

The potential loss of a small area of cropping and/or 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;
- the environmental benefits of solar energy, particularly in relation to reducing greenhouse gas emissions; and
- the economic benefits of solar energy in an area with good solar resources and capacity in the existing electricity infrastructure.

Based on these considerations, the Department is satisfied that the proposed solar farm represents an effective and compatible use of the land within the region. In addition, the Department has recommended suitable conditions to maintain the productivity of the agricultural land during construction and operation and to fully reinstate the agricultural capacity of the land following decommissioning of the project.

4.2 Amenity

Traffic and transport

Site access would be via Riverina Highway and Parfreys Road. Riverina Highway is an RMS road which serves as a key transport route for traffic travelling to local, regional and interstate locations. Parfreys Road is an unsealed Council-controlled road used by local traffic.

The main increase in traffic volumes associated with the project would occur during the 12 month construction period, which would include a peak period of approximately two months. The estimated daily average vehicle movements during peak construction period would be 169 light vehicle movements and 26 heavy vehicle

movements. One over dimensional vehicle would be required for the transportation of the substation transformer.

There would be minimal vehicle movements during operations.

A number of submissions from local residents raised concerns about the traffic impacts to Parfreys Road during construction of the project. Council and RMS have recommended that prior to the commencement of construction, the proponent would undertake necessary works to upgrade Parfreys Road to a standard suitable for use by heavy vehicles.

RMS recommended that Basic Right Turn (BAR) and Basic Left Turn (BAL) treatments are constructed at the intersection of the Riverina Highway and Parfreys Road. In addition, RMS advised that Parfreys Road is widened and sealed from its intersection with the Riverina Highway to the Mulwala Canal Bridge.

The Department has recommended conditions of consent requiring the Applicant to:
- undertake the relevant road upgrades prior to the commencement of construction;
- ensure the length of vehicles accessing the site does not exceed 26 m (except for one over dimensional vehicle) and the number of vehicles does not exceed the volumes predicted in the EIS; and
- prepare and implement a Traffic Management Plan in consultation with RMS and Council.

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.

Visual

The proposed solar farm is a relatively low-lying development with panel and inverter heights up to 3 m. Building heights would be up to 6.5 m in height, including the eight customised shipping containers associated with the energy storage facility. These structures are considered a similar size to agricultural sheds commonly utilised in the local area.

The photovoltaic panels are designed to absorb rather than reflect the sunlight, and the Department is satisfied that the project would not cause a noticeable glare compared to other roofs or building surfaces. The low height of the infrastructure would limit the visual impact from most viewpoints.

The nearest residence is located approximately 1 km to the south west of the site and has distant views of the project site. The remaining residences are all located over 1 km from the project site. Existing trees scattered between the residences and the project boundary restrict views of the project site, and a vegetation screening buffer is proposed at strategic locations around the site to further screen views of the project from these surrounding residences and roads.

The Department has recommended conditions of consent requiring the Applicant to:
- establish and maintain vegetation buffers to screen nearby residences;
- ensure that external lighting is minimised and complies with the relevant Australian Standards; and
- prohibit any signage or advertising on the development, unless for safety purposes.

Subject to the establishment of vegetation screening buffers, there would be no significant visual impacts on the surrounding residences, significant vistas or road users.

Noise

The proposed construction, upgrading and decommissioning activities would largely comply with the noise management levels in the *Interim Construction Noise Guideline* (ICNG). However, there would be short-term exceedances at two residences located about 1 km from the site.

These exceedances are predicted to be up to 2 dB(A) above the noise-affected criterion of 40 dB(A). The noise levels would be for a limited period and would remain well below the highly-affected noise level of 75dB(A) in the ICNG.

In addition, the noise assessment assumed that the three most significant noise sources were operating concurrently, which means that the predicted noise levels represent a worse-case scenario. It is likely that the actual construction noise impacts would be less than that predicted.

The Department is satisfied that any noise impacts would be limited to standard operating hours during the construction period and would be short-term. The Department considers construction noise can be minimised

by implementing the noise mitigation work practices set out in Tables 5 and 8 of the ICNG. These include scheduling activities to minimise noise, using quieter equipment, informing the immediately surrounding landowners and establishing a complaints handling procedure.

There would be negligible noise during operation.

The Department has recommended that conditions of consent requiring the Applicant to:
- 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; and
- prepare and implement a Construction Noise Management Plan.

4.3 Energy storage

In response to increasing demands for dispatchable energy, the Applicant is proposing an on-site energy storage facility, comprising up to approximately 3000 lithium-ion battery cells. The facility is proposed within a cleared and fenced 1 ha area in the northeast of the project site. The facility would include up to eight purpose-built containers (3.5 m high) to house the batteries.

The Applicant's hazard assessment in the EIS assessed risks associated with development and operation of lithium-ion batteries in accordance with *SEPP No.33 - Hazardous and Offensive Development*. The assessment concluded the proposed control measures would minimise the risks from handling, storage and operation of the batteries.

The Applicant intends to implement suitable energy storage hazard prevention and mitigation measures including (but not limited to):
- minimum separation distances of 5 m between battery containers;
- a 10 m asset protection zone comprising of gravel (or similar non-combustible ground cover) around the facility;
- an integrated fire suppression system in each container; and
- automated monitoring of voltage and temperature, including alarm and shutdown response systems; and
- integrated fire detection and fire suppression systems.

The Department has carefully assessed the proposed energy storage facility in consultation with its hazards unit and relevant Government agencies. The Department notes that the facility would be located away from residences and environmentally sensitive landscapes.

Subject to the recommended conditions and implementation of the mitigation measures in the EIS, the Department is satisfied that the risks associated with the facility would be minimal.

4.4 Other Issues

A summary of the Department's consideration of other issues is provided in **Table 2**.

Table 2: *Other issues*

Issue	*Consideration*	*Recommendations*
Energy Security	• Two submissions raised concerns that the project, or a combination of the project and a range of other renewable energy projects, could have an adverse impact on energy security in NSW, and increase electricity prices. • In particular, these submissions contend that renewable energy projects may force the closure of baseload energy suppliers (e.g. coal and gas), leading to higher energy prices as the remaining baseload suppliers may increase prices at times renewable energy cannot be generated. • The Department acknowledges and understands the broad concerns raised in these submissions, however any evaluation of these issues must have regard to the broader strategic context. • Firstly, NSW forms part of the National Electricity Market (NEM). The NEM is complex and is governed by a robust statutory framework at both the Commonwealth and State level which	• No specific conditions required.

Issue	*Consideration*	*Recommendations*
	covers the regulation of electricity generation, distribution and pricing. • Secondly, there is strong policy support at both the Commonwealth and State level for the increased development of renewable energy projects to ensure that a greater proportion of electricity is generated by renewable sources, and to reduce greenhouse gas emissions associated with any electricity generation. • Thirdly, the Department notes that long-term energy policies are being informed by recommendations in the *Independent Review into the Future Security of the National Electricity Market*, which provides a blueprint for ensuring Australia's energy systems remain affordable, reliable, sustainable and secure. • In the Department's view, the likelihood of the project having an adverse impact on energy security or electricity prices in NSW is extremely low, given that it would only add 95 MW of capacity to the NEM, which at this stage has a total generation capacity of over 54,000 MW. • Further, any incremental or cumulative impacts associated with the potential intermittency of renewable energy projects could be mitigated through the operation of the NEM.	
Biodiversity	• The project site comprises agricultural land that is mostly cleared and highly disturbed. • The project layout has been designed to avoid and minimise the biodiversity impacts of the project by locating the solar arrays and other key project components in mostly cleared and disturbed land. • However, approximately 2.68 ha of native vegetation would be cleared for the project, including some Western Grey Box tall grassy woodland, which is listed as an Endangered Ecological Community (EEC) under the NSW *Biodiversity Conservation Act 2016* (BC Act). • The Applicant has calculated the loss of 2.68 ha of native vegetation would require 13 ecosystem credits to be retired in accordance with the *Framework for Biodiversity Assessment*, and OEH is satisfied these have been correctly calculated. • No threatened flora or fauna species were identified within the project boundary and therefore no species credits have been generated. • The proposed clearing would involve the removal of 6 hollow-bearing trees, which can contain breeding habitat for the Major Mitchells Cockatoo and Superb Parrot (both listed as threatened under the BC Act). • In summary, the Department and OEH are satisfied that the project has been designed to avoid EECs and minimise native vegetation disturbance. • Subject to the recommended conditions, the Department is satisfied that the project would not have any significant impacts to biodiversity values over the medium to long term.	• Retire the required biodiversity offset credits in accordance with the *NSW Biodiversity Off*set Policy for Major Projects within two years of the commencement of construction. • Prepare a Biodiversity Management Plan in consultation with OEH. • Avoid removing the hollow-bearing trees during spring to early summer to avoid the main breeding period for hollow-dependent fauna.
Water and Erosion	• Three irrigation and drainage channels, which are managed and owned by Murray Irrigation Limited, border the site. No channel crossings are required for this project. • The large storage dam in the middle of the site would be emptied to avoid overflow during the operation of the solar farm. • The project would require approximately 7.2 megalitres (ML) of water during construction (primarily for dust suppression). • The water source for construction and operation is likely to be from existing Murray Irrigation channels adjacent to the site under the landowner's water allocation or trucked to site as required. • Potential erosion and sedimentation risks associated with the project can be effectively managed using best practice construction techniques.	• Prohibit water pollution. • Prepare and implement a Stormwater Plan and a Flood Response Plan. • Undertake activities in accordance with OEH's *Managing Urban Stormwater: Soils and Construction* (Landcom, 2004) manual.

Issue	*Consideration*	*Recommendations*
Heritage	• Database searches and on-site inspections identified two Aboriginal scarred trees within the project boundary. These trees would be avoided during construction and would not be impacted by the proposal. • Given the highly disturbed nature of the site, the likelihood of identifying unexpected items during construction is low. If Aboriginal artefacts or skeletal material are identified, all work would cease and the Chance Finds Protocol would be implemented.	• Cease works and notify the NSW Police and OEH if human remains are identified over the life of the project. • Prepare a Chance Finds Protocol. • Protect all heritage items on site, including those that would remain in situ.
Workforce Accom-modation	• The construction workforce for the 12- month construction period would be up to 150 people. • The workforce would be sourced from the local and wider region including the surrounding local government areas. • To ensure there would be sufficient accommodation to house construction employees, the Applicant would be required to develop an Accommodation Strategy.	• Prepare an Accommodation and Employment Strategy for the project in consultation with Council.
Other Hazards	• The project would comply with the National Health and Medical Research Council standards for electro-magnetic fields. • The fire risks can be suitably controlled through the implementation of standard fire management procedures. • The Applicant has committed to managing the entire site as an Asset Protection Zone and preparing a bushfire management plan to manage fire risk.	• Ensure the development complies with asset protection requirements. • Prepare an Emergency Response Plan in consultation with RFS and Fire & Rescue.
Subdivision	• The Applicant has proposed to subdivide Lot 88 DP756339 to facilitate development of the project substation. • However, the excised lot (1 ha) for the substation would be under the minimum lot size of 40 ha and is prohibited under a strict reading of the LEP. • Notwithstanding, development consent for the project as a whole can be granted despite the subdivision component of the application being prohibited by the LEP (under section 4.38(3) of the EP&A Act). • In this case, the Department is satisfied that the subdivision should be approved as part of the project as it would not result in the addition of any dwelling entitlements on the subdivided lots. • In addition, the Department notes the subdivision forms part of the overall project, of which is consistent with key objectives of the RU1 zone as it would encourage diversity in primary industry enterprises and minimise conflict between land uses.	• Subdivide the proposed lots subject to information being provided in accordance with requirements of section 157 of the *Environmental Planning and Assessment Regulation 2000.*

5. CONCLUSION

The Department has assessed the development application, EIS, submissions, and Response to Submissions, and additional information provided by the Applicant and relevant government agencies. The Department has also considered the objectives and relevant considerations in section 4.15 of the EP&A Act.

The Department considers the site to be suitable for a solar farm as it has good solar resources and available capacity on the existing electricity network. In addition, the site is relatively flat and has been largely cleared for agricultural purposes.

The project has also been well-designed to largely avoid areas with conservation value or hazards, particularly including native vegetation and irrigation channels. Any residual impacts would be minor and can be managed through the recommended conditions of consent.

The project would not result in any significant reduction in the overall agricultural productivity of the region. Additionally, the site could be easily returned to agricultural uses after the project is decommissioned and the inherent agricultural capability of the land would not be affected.

Importantly, the project would assist in transitioning the electricity sector from coal and gas-fired power stations to low emissions sources. It would generate up to approximately 198,600 MWh of clean electricity annually, which is enough to power up to 33,500 homes and save up to 190,700 tonnes of greenhouse gas

emissions per year. It is therefore consistent with the goals of the Commonwealth's *Renewable Energy Target* and NSW's *Climate Change Policy Framework.*

The Department is satisfied that the project achieves a reasonable 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.

6. RECOMMENDATION

For the purpose of section 4.38 of the *Environmental Planning and Assessment Act 1979*, it is recommended that the Executive Director, Resource Assessments and Business Systems, as delegate of the Minister for Planning:

- **consider** the findings and recommendations of this report;
- **approve** the SSD application for Tarleigh Park Solar (SSD 8436); and
- **sign** the attached development consent (**Appendix A**).

Recommended by:

16/05/18

Eleanor Parry
Environmental Assessment Officer
Resource and Energy Assessments

Recommended by:

16/5/18

Clay Preshaw
Director
Resource and Energy Assessments

7. DECISION

The recommendation is: Approved / Not approved by:

18/5/18

David Kitto
Executive Director
Resource Assessments and Business Systems
as delegate of the Minister for Planning

APPENDIX A:

Recommended Conditions of Consent

See website at http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8436

APPENDIX B:

Environmental Impact Statement

See website at http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8436

APPENDIX C:

Submissions

See website at http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8436

APPENDIX D:

Response to Submissions

See website at http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8436

APPENDIX E:

Additional Information

See website at http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8436