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Planner

Department of Environment, Land, Water and Planning

Sent via email to

Dear

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Response to Request for Further Information - Planning Permit Application No. PA2000978, West Mokoan Solar Farm

1.0 INTRODUCTION

AECOM Australia Pty Ltd (AECOM) continue to act on behalf 892 Yarrawonga Development C/- South Energy (the Applicant) in relation to Planning Permit Application No. PA2000978.

The planning application was submitted to Department of Environment, Water, Planning and Land (DELWP) on 07 October 2020 and amended pursuant to Section 50 of the *Planning and Environment Act 1987* (P&E Act) on 18 June 2021. The application is for the use and development of a Renewable Energy Facility and Utility Installation (solar farm and energy storage) and associated buildings and works, removal of native vegetation, display of business identification signage, removal and creation of access to a Road Zone Category 1 (the Project).

The Project is located at 892 Benalla-Yarrawonga Road, Goorambat; Benalla-Yarrawonga Road, Benalla, 616 Benalla-Yarrawonga Road, Benalla, Crown Land and road reserves of Benalla-Yarrawonga Road and Lake Mokoan Road (the subject site).

The purpose of this letter is to provide a response to the Request for Further Information (RFI) received from the Department of Environment, Land, Water and Planning (DELWP) (dated 16 July 2021), made pursuant to Section 54 of the P&E Act.

In support of this RFI response, the following documents are provided:

- Updated Planning Report prepared by AECOM (dated 26 August 2021), at Attachment A
- Updated Application Plans prepared by AECOM (dated 12 August 2021), at Attachment B
- Updated Survey Plans prepared by Tomkinson Group (August 2021), at Attachment C
- Updated Application Form, at Attachment D
- Updated Certificates of Title, at Attachment E
- Updated Glint and Glare Assessment prepared by AECOM (dated 26 August 2021), at Attachment F
- Updated Landscape Early Works Strategy prepared by AECOM (dated 26 August 2021), at Attachment G
- Generation Capacity Forecast, at Attachment H
- Updated Acoustic Assessment prepared by AECOM (dated 12 August 2021), at Attachment I.

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2.0 DELWP PLANNING RFI RESPONSE

The following information is provided in order of the points raised within the DELWP RFI (dated 16 July 2021) (shown in italics) as follows:

2.1 Application Documents

1. Application documents updated to reflect all land that is subject to the proposal.

a. It's unclear whether the proposal includes the removal of an easement on Crown Allotment 97C. It is shown as being removed on the powerline easement plan, however this land and easement is not included in any other application documents.

There is an existing 22kV powerline on the subject site between the southern and northern land parcels which is proposed be removed. An easement applies to the 22kV powerline (proposed to be removed) on the following lots:

- Lot 1 PS625748F of the northern land parcel
- Lots 1-5 of LP206524H of the southern land parcel.

Therefore, this easement is proposed to be removed. No easement exists for the 22kV powerline (proposed to be removed) on the following lots:

- Lot 1 TP173518C (within the northern land parcel of the subject site)
- Lot 2 on TP173518C,
- Allotment 2017 Parish of Goorambat (2017\PP2704)
- Crown Allotment 97C Parish of Goorambat (97C\PP2704)
- Lot 1 on TP576184 (between the northern and southern land parcels).

Therefore, no easement is proposed to be removed on these lots, including Crown Allotment 97C.

Refer to Section 3.12.1 of the Planning Report (Attachment A) and the Land Ownership map and Powerline Easement Plan of the Application Plans (Attachment B) for applicable updates. The Survey Plans (refer to Attachment C) have also been updated to no longer propose the powerline easement shown as C on Lot 1 TP173518C to be removed (this is the easement for the 220kV transmission line which is not proposed to be changed).

b. The land where the overhead powerline is proposed to connect the north and south areas of the project (Lot 1 TP576184) is not identified in the application documents or Figure 1 within the application form.

Part of Lot 1 on TP576184 will be included in the subject site to allow for the use of land for an overhead powerline to connect the northern and southern land parcels. We confirm that no works are proposed within the parcel (the overhead powerline will be overhanging with poles installed on either side). In addition, we note that Goulburn Murray Water provided Landowner Consent for the overhead powerline in this location (refer to Appendix R of the Planning Report provided in the 18 June 2021 amendment and RFI response).

The Application Plans (refer to Attachment B) have been updated to include part of Lot 1 on TP576184 in the subject site. The Application Form, at Attachment D has also been updated to reflect this change. Section 3.3 of the Planning Report (Attachment A) has been updated to include the proposed powerline.

c. It appears the title documents have not been submitted (or only title plans have been submitted) for: i Lot 4 PS206524; ii Lot 5 PS206524; iii Lot 1 TP104377; iv Lot 1 TP576184; v Allot. 2017 Parish of Goorambat (shown as government road on other titles submitted); vi Crown Allotment 97C (if relevant)

Refer to Attachment D for an updated application form, including Certificate of Title Details and Attachment E for the Certificates of Title including title documents for Lot 4 on PS206524, Lot 5 on PS206524, Lot 1 on TP104377 and Lot 1 TP576184. Title documents for Allotment 2017 Parish of



Goorambat (2017\PP2704) are unavailable from the title office. As per the response to query 1a. Crown Allotment 97C is not included within the subject site.

d. If applicable, please also include in the application documents (including application form) any road reserves that form part of the subject land.

As identified in this letter and the Planning Report, the subject site includes the road reserves of Benalla-Yarrawonga Road and Lake Mokoan Road. Refer to Attachment D for an updated application form, including Certificate of Title Details.

2.2 220kV Powerline Easement

2. Clarification as to whether the proposal includes the realignment of a 220kv powerline easement. The cover letter suggests it is not, however the legend on the submitted plans show a 'proposed 220kv easement realignment', and it is also mentioned in the planning report.

The proposal does not include realignment of the 220kV transmission line easement. Reference to the realignment of the 220kV transmission line easement was left in the Planning Report and the Concept Plan in error. The Project includes the removal and realignment of the 22kV powerline easement and the removal and realignment of the drainage easement. Section 6.8.1 of the Planning Report (Attachment A) and the Application Plans (Attachment B) have been updated to rectify this error.

2.3 Development Plans

- 3. Development Plans updated to include:
 - a. Dimensions and elevations of the proposed battery containers;

The Application Plans (refer to Attachment B) have been updated to include dimensions and elevations of the proposed battery containers.

b. Utility Layout Plan (showing switch room, control room, cable routes and offices/amenities buildings). This plan is mentioned in the submitted cover letter but doesn't appear to be included;

The Application Plans provided in the 18 June 2021 amendment and RFI response included the Utility Layout Plan at page 16 "SOLAR FARM TYPICAL UTILITY AREA PLAN AND ELEVATION". Refer to Appendix B of the Planning Report provided in the 18 June 2021 amendment and RFI response.

c. Elevation plan showing the MV overhead line connection. This plan is mentioned in the submitted cover letter but doesn't appear to be included.

The location of the poles for the MV overhead line connection cannot be provided at this stage of the design. The poles are not proposed to be sited within the Stockyard Creek land (Lot 1 on TP576184). Refer to Figure 1 for an image of the creek/channel. Note 11 on the Application Plans (refer to Attachment B) has been updated to state that the design and construction will not occur in the creek land or channel.



Figure 1 Stockyard Creek Channel looking south from Winton Wetlands



- 2.4 Glint and Glare Assessment
- 4. Glint and Glare Assessment updated to include:
 - a. A map showing the direction of receipt of glare for each Observation Point (dwelling) and Route Receiver (road and railway),
 - b. Detail of the glint and glare mitigation methods that will be employed to ameliorate glint and glare at each Observation Point (dwelling) and Route Receiver (road and railway), including recommendations on the length, height and materials for glare mitigation screening;
 - c. An assessment from a suitably qualified person confirming that glint and glare from the solar farm would not have an impact on road or aviation safety, or the reasonable amenity of residents of the dwellings modelled in the report.

The Glint and Glare Assessment has been updated based on this request (refer to Attachment F).

Figure 5 of the Glint and Glare Assessment shows the location of each Observation Point and Route Receiver in relation to the solar farm. As outlined in Section 3.3 of the Glint and Glare Assessment, *'direction of receipt of glare'* cannot be defined due to limitations of the GlareGauge software. It is noted that the viewpoints of the dwellings closest to the Project are shown at Figure 43 of the Landscape and Visual Impact Assessment. Further, Appendix C of the Glint and Glare Assessment provides additional detail regarding the modelling results from each Observation Point and Route Receiver, providing a more 'zoomed in' view.

As per the Landscape Plan (refer to Appendix H of the Planning Report in the 18 June 2021 amendment and RFI response), vegetation screening is proposed along the boundaries of the site as either five or 10 metre wide planting zones or infill planting zones where existing vegetation was considered sufficient to screen views to the solar farm. As per the updated Concept Plan (Attachment B), the security fence has been moved behind the vegetation screening.

Sections 6.0, 7.0 and 8.0 of the Glint and Glare Assessment have been updated to consider the ability for the proposed vegetation screening to mitigate the predicted glare.

The assessment notes that once vegetation has reached a height of three and a half metres, any predicted impacts at surrounding dwellings and the adjacent roads would likely be removed. It is anticipated to take five years for the proposed vegetation screening to reach three and a half metres in height. During the period when the vegetation is growing to a sufficient height, either of the following options can be implemented:

- A. Install manmade screening (shade cloth, glare screen or non-transparent security fence) on the site's security fence at three and a half metres high (noting that the existing security fence would need to increase in height to support this screening), OR
- B. Limit the resting angle of the solar panels to a minimum of 14 degrees during backtracking operation.

The current preference is to restrict the resting angle to 14 degrees, however both options are able to mitigate the impacts of possible glint and glare until vegetation screening reaches the required height of three and a half metres.

The Glint and Glare assessment concludes that:

If the glare mitigation strategies recommended in this report are established, it is reasonable to consider glint and glare from the solar farm would not have an impact on road or aviation safety, or the reasonable amenity of residents of the dwellings modelled in the report.

The Landscape Early Works Strategy proposes early planting in targeted locations to enable growth of vegetation screening prior to construction and operation of the solar farm. The Strategy has been updated in response to option A above, showing vegetation in front of the security fence including the indicative manmade screening at two years and 10 years post-installation of tube stock (refer to Figures 6, 8, 10 and 13 of Attachment G).

Construction was initially anticipated for the second half of 2022 but is now more likely to commence the first half of 2023. South Energy will endeavour to implement the proposed early works planting as



soon as possible after receiving a planning permit for the project. This will reduce the amount of time (approximately five years) needed for the landscaping to reach the three and a half metres height at which time the chosen mitigation measure could be considered for removal.

We are seeking a suitably worded permit condition to satisfy this further information request should it be considered necessary based on the response provided in this letter. The condition may be worded generally as follows:

Prior to the commencement of construction, details of the proposed mitigation (screening to security fence or limiting resting angle during backtracking) shall be submitted for approval, including a programme for review at an appropriate interval (e.g. five years) to confirm whether vegetation has achieved a suitable height and density to enable removal of the mitigation measure.

2.5 Landscape and Visual Impact Assessment

5. Landscape and Visual Impact Assessment updated to include:

a. Assessment of the proposed glint, glare, and noise mitigation measures (e.g. screening on perimeter fencing, noise walls, etc.).

The Landscape and Visual Impact Assessment (LVIA) has assessed the entire project, including mitigation measures. It is considered that the LVIA has considered the worst case scenario for the Solar Farm and associated mitigation measures. As a result of this RFI, the Glint and Glare Assessment and Acoustic Assessment have been updated to confirm proposed mitigation measures.

The Concept Design has also been updated to show that security fencing for the solar farm will be internal to the proposed landscape planting. It is therefore considered that the landscape and visual outcomes of the project will be the same, if not better than what was assessed in the LVIA.

Further, the Landscape Early Works Strategy (Attachment G) was prepared based on the recommended glint and glare and noise mitigation measures to ensure that early landscape planting would mitigate impacts prior to operation of the facility.

The Landscape Early Works Strategy has now been updated to reflect the updated Glint and Glare and Acoustic Assessments. This includes an updated in response to option A of the proposed glint and glare mitigation, showing the landscape planting at two years and 10 years in front of the security fencing and indicative manmade screening (refer to Figures 6, 8, 10 and 13 of Attachment G). Having the fencing internal to the landscaping will assist in mitigating views to the solar farm infrastructure, in particular the fencing and any manmade screening (if required).

2.6 Acoustic Assessment

6. Acoustic Assessment updated to include:

a. Assessment of the proposal operating at 100% at all times of day, unless evidence is provided to support the assumptions of reduced capacity overnight (e.g. sufficient proof that fans will not operate at more than 50% before 7am). Based on this assessment, the report (including recommendations) should be updated to demonstrate the proposal can comply with the relevant noise limits.

The Applicant has undertaken a Generation Capacity Forecast (the Forecast) for the project using historical solar irradiation data sourced from SolarGIS (a certified data source considered widely acceptable to banks and financial institutions when considering funding for solar projects) and processed in PVsyst (the most commonly used software in the solar industry) to show the typical meteorological data for a year. The Forecast for all hours is provided at Attachment H. The 'Hour' in the Forecast represents the start point of an hour (i.e. 5am means the duration of 5:00am – 5:59am). The 'Performance Ratio' in the Forecast is the generation capacity as a percentage of the maximum capacity.

The Forecast shows that the Project will start generating power from 5am at the earliest and cease operation at 7:59pm at the latest. With regard to the 'Night period' (10pm to 7am) as defined by *Noise Limit and Assessment Protocol for the Control of Noise from Commercial, Industrial and Trade Premises and Entertainment Venues* (Noise Protocol), the Forecast shows that the Project would not operate at greater than 50% capacity within the period. There are only three instances where the

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Forecast indicates 50% capacity, being 19 November and 10 and 11 December in the 6am - 6:59am time period. At all other times within the 'Night period', the Forecast shows capacity being less than 50%.

Figure 2 shows the data from the Forecast for a summer day illustrating that the percentage of maximum power does not exceed 50% within the 'Night period'. Based on this evidence, the updated Acoustic Assessment (refer to Attachment G) continues to assess the solar farm at 100% operation in the day and evening periods and 50% in the night period. The Acoustic Assessment has however been updated to confirm the mitigation proposed for the project (refer section 6.0 Recommendations) and has been updated based on the new EPA Noise Protocol.

We suggest that prior to commencement of construction, during the detailed design stage of the Project, the Acoustic Assessment should be revisited or refreshed based on the latest technology available at that point of time. It is anticipated that any updated assessment would be provided to DELWP for endorsement prior to construction and an appropriately worded condition be applied. South Energy are comfortable with a condition that limits the project to the applicable noise levels.



Figure 2 Generation Profile – Summer Day (Source: South Energy Generation Capacity Forecast 2021)



3.0 CONCLUSION

We trust that the further information provided in this letter and the enclosed documentation satisfies DELWP's request and that the application can now proceed to the notice and review process.

Should you require any additional information or would like to discuss any aspect of the application please do not hesitate to contact the undersigned.

Yours faithfully







ATTACHMENT A – Planning Report



ATTACHMENT B – Application Plans



ATTACHMENT C – Survey Plans



ATTACHMENT D – Application Form



ATTACHMENT E – Certificates of Title



ATTACHMENT F – Glint and Glare Assessment



ATTACHMENT G – Landscape Early Works Strategy



ATTACHMENT H – Generation Capacity Forecast



ATTACHMENT I – Acoustic Assessment