

APPLICATION ON NOTIFICATION – CROWN DEVELOPMENT

During the notification period, hard copies of the application documentation can be viewed at the Department of Planning, Transport and Infrastructure, Level 5, 50 Flinders St, Adelaide, during normal business hours. Application documentation may also be viewed during normal business hours at the local Council office (if identified on the public notice).

Written representations must be received by the close date (indicated above) and can either be posted, hand-delivered, faxed or emailed to the State Commission Assessment Panel (SCAP). A representation form is provided as part of this document.

Any representations received after the close date will not be considered.

<u>Postal Address:</u> The Secretary State Commission Assessment Panel GPO Box 1815 ADELAIDE SA 5001

<u>Street Address:</u> Development Division Department of Planning, Transport and Infrastructure Level 5, 50 Flinders Street ADELAIDE

Email Address: scapreps@sa.gov.au

Fax Number: (08) 8303 0753

Government of South Australia



Department of Planning, Transport and Infrastructure

DEVELOPMENT ACT 1993

NOTICE OF APPLICATION FOR CONSENT TO DEVELOPMENT

SECTION 49 – PUBLIC INFRASTRUCTURE

Notice is hereby given that an application has been made by **The Solar River Project Pty Ltd** for consent to vary DA 010/V082/17 The Solar River Project: portion of underground transmission line varied to overhead powerline Development Number: **010/V082/17 V1.**

The subject land is situated at Lower Bright Road, Robertstown and comprises various land parcels identified as A50, DP51338 [CT 5689/927]; A51, DP51338 [CT 5689/928]; S9, HP200300 [CT 5970/794]; A102, DP51041 [CT 5620/188]; A103, DP51041 [CT 5620/189]; S11, HP200300 [CT 5427/171]; S12, HP200300 [CT 5222/946]; S228, HP200300 [CT 5443/611].

The development site is located within the Primary Production Zone of the Regional Council of Goyder Development Plan (Consolidated on 24 November 2016).

The application may be examined during normal office hours at the office of the State Commission Assessment Panel (SCAP), Level 5, 50 Flinders Street and at the office of Regional Council of Goyder. Application documentation may also be viewed on the SCAP website

http://www.saplanningcommission.sa.gov.au/ scap/public_notices.

Any person or body who desires to do so may make representations concerning the application by notice in writing delivered to the Secretary, State Commission Assessment Panel, GPO Box 1815, Adelaide SA 5001 **NOT LATER THAN FRIDAY 19 OCTOBER 2018.** Submissions may also be emailed to: scapreps@sa.gov.au

Each person or body making a representation should state the reason for the representation and whether that person or body wishes to be given the opportunity to appear before the SCAP to further explain the representation.

Submissions may be made available for public inspection.

Should you wish to discuss the application and the public notification procedure please contact Laura Kerber on 7109 7073 or laura.kerber@sa.gov.au.

Alison Gill SECRETARY STATE COMMISSION ASSESSMENT PANEL

PN3227

www.sa.gov.au

DEVELOPMENT ACT, 1993 S49/S49A – CROWN DEVELOPMENT REPRESENTATION ON APPLICATION

Applicant	:		The Solar River Project Pty Ltd					
Developm	nent N	umber:	010/V082/17 V1					
Nature of Development:		lopment:	Variation to DA 010/V082/17 The Solar River Project: portion of underground transmission line varied to overhead powerline					
Zone / Po	licy Ar	ea:	Primary Production Zone					
Subject La	and:		Several allotments on Lower Bright Road, Robe	rtstown				
Contact O	fficer:		Laura Kerber					
Phone Nu	mber:		7109 7073					
Close Dat	e:		FRIDAY 19 OCTOBER 2018					
My Name:			My phone number:					
Primary me	ethod(s	s) of contact:	Email:					
			Postal Address:	Postcode:				
(au may ha c	ontoct		minoted DRIMARY METHOD(c) OF CONTACT if you in					
			ominated PRIMARY METHOD(s) OF CONTACT if you in n Assessment Panel in support of your submission.	ndicate below that you wish to				
-								
My interes (please tick			owner of local property					
			occupier of local property					
			a representative of a company/other organisation a	ffected by the proposal				
			a private citizen					
The address o	of the p	property affect	ted is:					
				Postcode				
My interes (please tick			I support the development					
			I support the development with some concerns					
			l oppose the development					
The specific a	spects	of the applica	tion to which I make comment on are:					
	_	wish to he h	eard in support of my submission					
l:								
(please tick one)		(Please tick or	to be heard in support of my submission ne)					
Ву:		appearing p	ersonally					
(please tick one)		being repres (Please tick or	ented by the following person he)					
Signature:								
Date:								

DEVELOPMENT APPLICATION FORM

PLEASE USE BLOCK LETTERS	FOR OFFICE USE						
COUNCIL:	Development No:						
APPLICANT: The Solar River Project Pty Ltd	Previous Development No:						
Postal Address: ThincLab G32, Ground Floor,	Assessment No						
10 Pulteney Street Adelaide.							
Owner:		Application forwarded to DA					
Postal Address:	Non Complying	Commission/Council on					
BUILDER:	Notification Cat 2						
	Notification Cat 3	Decision:					
Postal Address:	Referrals/Concurrences	Туре:					
	DA Commission	Date: / /					
Licence No:	1						
CONTACT PERSON FOR FURTHER INFORMATION	Decision required	Fees Receipt No Date					
Name: _Aju Yeldhose	Planning:						
Telephone: 0416632301 [work] [Ah]	Building:						
	Land Division:						
Fax: [work] [Ah]	Additional:						
EXISTING USE:	Development Approval						
DESCRIPTION OF PROPOSED DEVELOPMENT: Transmission	on line Variation near substatio	n to Development No:010/V082/17					
LOCATION OF PROPOSED DEVELOPMENT:							
House No: Lot No: Street:	Town/Suburb: _						
Section No [full/part] Hundred:	Volume:	Folio:					
Section No [full/part] Hundred:	Volume:	Folio:					
LAND DIVISION:							
Site Area [m ²] Reserve Area [m ²]	No of existing a	allotments					
Number of additional allotments [excluding road and reserve]: _	Lease:	YES NO					
BUILDING RULES CLASSIFICATION SOUGHT:	Present classification:						
If Class 5,6,78 or 9 classification is sought, state the proposed number of employees: Male: Female:							
If Class 9a classification is sought, state the number o persons for whom accommodation is provided:							
If Class 9b classification is sought, state the proposed number of	occupants of the various space	s at the premises:					
DOES EITHER SCHEDULE 21 OR 22 OF THE DEVELOPMEN	T REGULATIONS 2008 APPLY	? YES 🚺 NO 🗖					
HAS THE CONSTRUCTION INDUSTRY TRAINING FUND ACT 2008 LEVY BEEN PAID? YES 🗖 NO 🗖							
DEVELOPMENT COST [do not include any fit-out costs]: \$	i						
l acknowledge that copies of this application and supporting documentation may be provided to interested persons in accordance with the Development Regulations 2009.							
SIGNATURE: JASON MA, MAN	ABING Du23	ated: 271 7 1 18					

SIGN	ATURE	
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Development Application Variation #1 Number 010/V082/17 5600m Section of Underground Transmission Line to Overhead Transmission Line

The Solar River Project Pty Ltd

27th July 2018

Approver: Jason May

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Solar River Project

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<u>Glossary</u>

MW	Mega Watt
AC	Alternating Current
AEMO	The Australian Energy Market Operator
AIS	Air-insulated switchgear
CASA	Civil Aviation Safety Authority
CEMP	Construction Environmental Management Plan
DC	Direct Current
DEWNR	Department of Environment, Water and Natural Resources
DPTI	Department for Transport, Energy and Infrastructure
EPC	Engineering, Procurement and Construction
FIRB	Foreign Investment Review Board
НА	Hectares
HV	High Voltage
kV	Kilo Volt
mm	millimetre
MWh	Megawatt hour
OTR	Office of the Technical Regulator
PV	Photovoltaics
SA	South Australia
SEB	Significant Environmental Benefits
SRP	The Solar River Project Pty Ltd
T&D	Transmission and Distribution

EXECUTIVE SUMMARY

The Solar River Project Pty Ltd is a Crown Development Approved Project. SRP seeks a variation to the development application number **010/V082/17 – Variation #1** will detail the change contained herein and the benefits. Variation #1 includes the replacement of the proposed underground section along Lower Bright Road Robertstown with a overhead powerline. The adjoining landowners have agreed overhead easements and a change from underground to overhead is now possible.

This variation application is submitted pursuant to Section 49 of the Development Act 1993 with the endorsement of the Department of State Development. The Section 49 process is appropriate for electricity infrastructure such as the proposed solar plant, as generation is provided to the people of South Australia and represents a service historically provided by the State Government.

The proposed variation incorporates the following key elements:

The original underground cable route via Goyder Council carriageway "Lower Bright Road" was necessary as landowners had not yet agreed with the 50-metre-wide easement required for an overhead power line. The relevant landowners have now agreed to easement terms and an overhead line is now possible.

The Powerline will be identical to that approved in the original application. All approval constraints and construction conditionality will be adopted as same.

A higher volume of traffic to the site is expected during construction phases. A detailed traffic assessment and controls will be included in a construction management plan. The plan will address traffic safety and access issues inherent with using heavy, oversized vehicles and general light construction traffic.

Construction noise and dust will pursuant to the CEMP in collaboration with nearby residents. The one dwelling occupied dwelling on Lower Bright Road and the second located 1km from the line belongs to participating landowners. Regardless Construction activities are unlikely to affect the occupant/s directly. Dust suppressions methods such as water trucks will be used during construction to limit dust emissions due to vehicle movements. No night time work is planned.

No State or Commonwealth threatened flora species or plant communities were recorded during the desktop assessment. Given the highly degraded nature of the subject site, it is not considered likely that any threatened plant species or communities are present. Mitigation plans will be employed and detailed environmental assessment will take prior to detail design with will identify the avoidance area.

The subject site has been assessed as being of low Aboriginal archaeological sensitivity due to the lack of temporary or permanent water sources. In addition, the site has been subject to ground disturbance through pastoral, agricultural and grazing activities.

Overall, the development assessment comply with the standards, codes, and policies included in the Development Act, the Development Plan, and the Guide to the Assessment of Crown Development and Public Infrastructure.

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1. INTRODUCTION

1.1.VARIATION OUTLINE

SRP seeks a variation to the replace the proposed 5.3km underground transmission line with 5.6km of overhead powerline (increased length due to terrain and vegetation constraints, located along Lower Bright Road Robertstown. The landowners have agreed easements and a change from underground to overhead is now possible. The two landowners with an occupied dwelling along the proposed route are project participants supporting this variation.

1.2.THE DEVELOPMENT APPLICATION PROCESS

The Solar River Project Pty Ltd has prepared this variation to the development application No: 010/V082/17 for submission to the DPTI/Department of Premier and Cabinet (DPC) for lodgement to the Development Assessment Commission (DAC). The application is lodged in accordance with the public infrastructure provisions of section 49 of the Development Act 1993 (SA), for the approval of the construction and operation of the proposed project and ancillary infrastructure.

1.3.THE SOLAR RIVER PROJECT

The Solar River Project Pty Ltd. Registered Address of Company is 10 Pulteney Street Adelaide South Australia 5000, Adelaide University Building.

1.4.APPLICANT DETAILS

The applicant's details are as follows:

Development No	:010/V082/17 Powerline Variation
Applicant Name	: The Solar River Project Pty Ltd
Contact	: Jason May (Managing Director)
Address	:10 Pulteney Street Adelaide South Australia 6000, Adelaide University
	Building, ThincLab, Suite WS G32
ACN	: 622113517

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2. TRANSMISSION LINE ROBERTTOWN SUBSTATION TO DARTMOOR SITE

2.1.1. TRANSMISSION LINE

The transmission line consists of a lighter construction intermediate line pole, terminal and Angle poles. A Terminal pole is used when the overhead power line terminates and is connected to substation equipment, or transitions to an underground cable. Angle poles are used where the line changes direction. The examples of poles used are shown in **Error! R eference source not found.** This will be installed according to the transmission line regulation and legislation Act of South Australia. The line route from Dartmoor (site) to Robertstown substation goes through several properties, the transmission line easement will be subjected to environmental and ecological assessment while the detailed design is in progress. There will be minimal disturbance to vegetation and the ecology during the construction of the transmission line. The solar river transmission line pole height will not exceed 30m, similar to other ElectraNet lines in the region.





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Figure 1: Example (132kV) Transmission line and structural pole (line, terminal and angle) and proposed 275kV Pole

The new overhead transmission line will be constructed from the Robertstown substation to site. The proposed 50 m line easement for the new transmission line is shown in Figure 3. The approved underground cable will be replaced with a short 5.3km overhead section approximately 5.6km, the design will be completed in harmony with avoidance of Flora, fauna and heritage areas. The optimum line route with this 100m corridor will be determined during detailed design. The line will be limited to sections as nominated in Figure 2. The design and pole location will consider minimal disruption to flora fauna, avoiding public roads and dwellings. Construction methodology as detailed in the CEMP will consider access, heritage and vegetation protection zones. Every pole location will be subject to a detailed ecological and heritage site survey as detailed in the CEMP.



Figure 2: Transmission route from the substation (Section 50) to (Section 32)

3. TRANSMISSION LINE VARIATION LOWER BRIGHT ROAD ROBERTSTOWN

3.1.INTRODUCTION AND LOCATION

It is proposed a new transmission line to be installed from the ElectraNet Robertstown substation to Lot 32 location 5300m east of the Substation on Lower Bright Road. The proposed overhead transmission line to be 275kV line, this consists of new conductor and supporting pylons. The Proponent describes the following actions as part of the Project:

- New galvanised mono- poles and conductor will be installed
- The number of poles installed will be approximately will be 14 subject to detailed design.
- Holes will be excavated at each pole location.
- Ecological specialist will develop control measures to protect flora and fauna species and soil stability during construction. A whole of life maintenance plan will reflect same.
- Establishment of a temporary site compound and several pole-laydown areas during the construction process

The project will be located on land in the Goyder council and in Warnes Out of Hundreds Burra (Pastoral Unincorporated Area). There are already existing 132kV and 275kV lines in the area. The overall line route is shown Figure 3, The line route may vary subjected to detailed design taking into account of sensitive areas up to 100m either sides of line route within the land parcels identified.

Legend	▼ 2.46	Ģ i	40	5•	e	1	90 10	u	12 18	5	
Robertstown Substation	1.76 1	77 178	179	180 G	181 Vder H	182	183 184	- D. 202	186	187	144 14
Site	174	173	172	171	17	Goy	167 16	6 165	164 16	143	145 14
 – SRP Transmission line approved – SRP Transmission Line for approval 	8 145	146	148	149	151	152 155	167 16 Ter Hay 96	259 160	161 16	140	137 136 137
 – SKF Transmission Line for approval – Existing 137kV transmission 	144	138	4		150	153	156	N		95-	2/
C C	2 141 13	9	135	134		130	129 121	8 127	126	123 139	62 135 134
 Existing 275kV transmission Note: The line represents a 50m design Corridor either side for 60m easement to avoid trees and sensitive areas 	140	137		112	133	132 202	131	119 118 /		246 121 97	99 100 98E
230	08 109	103	10.2	113	-	97		93 93	2	Noad 80%	930
240 218 219 10	7 106 105	104	193	100	- 99	98 96	95 RC 69	4/DER116	89		
2A 238 3B 3C	6 67 68	69 70	71	72	74	75 77	78 8		85 86	Boundary	69
259 50 49 48 233 IN	188			7	3	76		2 83	84 87	1 10 65	62
255 24E 201 24W 201 231 6	63	werline	e Ro	ad	58	57 5	ford RC	53	52: 51	Bower 9 69	63
2 46 188 44 232 91 3	3 34 35	36, 37	38	39	40	42 43	44. 45	5 46	47 48	49 3.2	33 3
	191	+ +	27		25	23	2.2	19	18	31	28
15 100 10C 229 227 228 3	² Lowe	r Brigh		26	25	24	21	20	0	30	29
173 168 235 31m 458 351 361 362 163	62 2 3	4 5	6	7	8	9 10 7 144	11 1	2 13	14 15	16 I 3	2

Figure 3: Transmission line route from the Robertstown substation to Section 32

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3.2.LAND DESCRIPTION

The new transmission line will cross 9 parcels of land as well as Goyder council Lower Bright Road. The table details the land parcels included in the development. The affected land holders Table 1 have been consulted re the proposed development and are all project participants.

Table 1: Land Descriptions

PARCEL IDENTIFIER	PROPERTY HOUSE	PROPERTY ST NAME	PROPERTY SUBURB	TITLE
D51338AL50	192	LOWER BRIGHT	BRIGHT	CT5689/927
D51338AL51	LOT 51	GOVT	BRIGHT	CT5689/928
H200300SE9	LOT 9	LOWER BRIGHT	BRIGHT	CT5970/794
D51041AL102	118	EAGLE HAWKE GATE	BRIGHT	CT5620/188
D51041AL103	LOT 103	LOWER BRIGHT	BRIGHT	CT5620/189
H200300SE11	LOT 11	LOWER BRIGHT	GERANIUM PLAINS	CT5427/171
H200300SE12	631	LOWER BRIGHT	GERANIUM PLAINS	CT5222/946
H200300SE228	631	LOWER BRIGHT	GERANIUM PLAINS	CT5443/611
H200300SE229	LOT 221	GOVT	BRIGHT	CT5561/287

3.3.ENVIRONMENTAL IMPACT ASSESSMENT

Environmental impact assessment is a process for identifying, predicting, planning for and managing the physical, ecological, economic and social impacts of development proposals prior to approval being considered.

3.3.1. FLORA

The project will result in some disturbance of species and ecological community. The Solar River Project will avoid heavy vegetation areas. The Native vegetation present in the land sections are described in Table 2. All the land parcels are heavily disturbed used for agricultural purposes.

Table 2: Parcel/ Land and the Vegetation Description of vegetation present in the land

PARCEL IDENTIFIER	D51338AL50, D51338AL51, H200300SE9, D51041AL102, D51041AL103, H200300SE11, H200300SE12, H200300SE228, H200300SE229
Description of Vegetation	Eucalyptus gracilis, Eucalyptus oleosa ssp. oleosa, Eucalyptus socialis ssp., +/- Eucalyptus dumosa mid mallee woodland over Enchylaena tomentosa var., Senna artemisioides ssp., Senna artemisioides ssp. petiolaris (NC), Grevillea



huegelii, Olearia muelleri mid open shrubland over Zygophyllum aurantiacum ssp., +/-Maireana pentatropis low sparse shrubland

The over lay of the proposed transmission line route with Native vegetation is shown in Figure 4. A detailed environmental site assessment at each pole location will be undertaken during detailed design, where the route is established with minimal disruption of vegetation. A detailed 50-metre-wide environmental assessment will be undertaken for the transmission line to avoid any sensitive areas. The line route can be adjusted within the proposed 100m approval buffer to avoid said areas.

Mitigation plans will be implemented as following:

- Development and implementation of a CEMP
- In accordance with the CEMP a defined disturbance zones will be established at each pole replacement site prior to works commencing.
- Vehicle and equipment parking/storage sites should be established in previously disturbed areas (i.e. areas already cleared of native vegetation in all strata)
- Movement of machinery and vehicles should occur along/within the proposed power line easement, or to utilise existing road and track to avoid unnecessary disturbance.
- Rehabilitation of soils and vegetation within PDZs, within 1 month of the completion of works at each individual Pole Disturbance Zone.
- Disturbed areas are to be re-vegetated with a mixture of native grass species seeds, preferably collected from the local region.



Figure 4: Native Vegetation along the transmission line easement



3.3.2. FAUNA

The Fauna species listed in Table 3 is on 1 km buffer zone from the proposed transmission line route. As seen there is no rare species been identified in the region through the desktop assessment.

The mitigation of any of the rare species will be;

- Engage a suitably qualified ecologist to implement White Winged Chough Protection and Management Plan if necessary.
- Any areas identified during detailed site inspection to have fauna species habitat will be avoided
- No detrimental impact to these species is envisaged, regardless SRP will contribute to offsets and breading programs.

Table 3: NatureMaps List of possible Fauna species on the Transmission line route

CLASS NAME	SPECIES	COMMON NAME	NATIVE	NUMBER OF RECORDS	LAST SIGHTED
AVES	Ocyphaps lophotes	Crested Pigeon	Y	1	11-Oct-2010
REPTILIA	Pogona sp.		Y	1	11-Oct-2010

3.4.TRAFFIC

Traffic management will be conducted in accordance with the development approval.

3.5. VISUAL IMPACT ON TRANSMISSION LINE

There is one residential properties which has direct lines of sight to the transmission line. This residential is a project participant. There are existing transmission lines and they are highly visible along Lower Bright Road. There is no perceived negative impact on the landscape associated with the proposed design. A Viewshed analysis is attached in Appendix B, like similar lines in the area this is a representation as seen by the local resident in transit.

The view from nearby dwellings has been taken into account. Figure 5 shows the surrounding dwellings to the proposed transmission line. The stars show the rural access point to the dwellings. For most the transmission line route is not visible. TheTable 4 shows the summary of dwellings in related to the visibility of the transmission line.

Table 4: The dwelling and the visibility of the transmission line from the dwelling.

Rural Access point	Occupied/Unoccupied	Project Participant	Visible (Yes/No)	Consulted (Yes/No)	Objections (Yes/No)
631	Occupied	Yes	Yes	Yes	No
118	Occupied	Yes	Yes	Yes	No
235	Unoccupied	No	Yes	Yes	No



Figure 5: Residents Surrounding the proposed transmission line

3.6.DETAILED CONSIDERATIONS

Comprehensive Construction Environment Management Plan CEMP as previously approved will be developed prior to the undertaking of any construction or development activities. These plans shall include as a minimum:

- Measures to avoid impacts on areas outside of development footprints;
- Erosion and Sediment controls to be implemented during construction and remediation;
- Flora and Fauna Protection and Management Plan;
- Waste management plans for construction activities;
- Workplace health and safety plans to protect workers and the public from harm;
- Unanticipated Discovery Protocols for the management of impacts unexpected heritage object finds;
- Traffic management plans;
- Revegetation/remediation plans.
- The transmission line route suggested has a 50m design Corridor (Contained within the land parcels nominated) on either side of the array and proposed line route for 50m easement to avoid trees and sensitive areas.

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4. HEALTH, SAFETY AND FIRE RESPONSE

• As Approved Previously

5. POTENTIAL IMPACTS AND PROPOSED MITIGATION MEASURES

5.1.1. FLORA

IMPACT

The detailed design will avoid areas of native vegetation, as identified through ecology site survey. In accordance with the NVC Guidelines for a Native Vegetation Significant Environmental Benefit Interim Policy, vegetation clearing for the Project has been assumed to be 2% of the Project area. However, it should be noted that in the absence of detailed design, it is not expected the long-term impact will be across the site as there are uncertainties in relation to the medium to long-term impacts of shading on vegetation health over time.

No vegetation communities of conservation significance were observed during the baseline survey. Significant Environmental Benefit payment (under the Native Vegetation Act) to a third-party SEB provider or into the Native Vegetation Fund will provide a suitable offset for this clearance.

Due to the minimal amount of native vegetation present on site the vegetation clearance amount will be minimal to nil subjected to detailed design and further inspection by an ecology specialist.

The spread of environmental weeds through construction activities can potentially inhibit the regeneration of indigenous species on the disturbed construction sites, forming a longer term, perhaps permanent, weed cover, and can result in the invasion of adjoining, non-disturbed vegetation, particularly by species not currently present. Weed hygiene protocols will be implemented during construction activities to minimise the risk of weed spread and ongoing weed management will be undertaken where required, in consultation with the landowner and NRM Board where relevant.

MITIGATION AND MANAGEMENT MEASURES

Management and mitigation measures for flora values are developed to achieve the following outcomes:

- Implementation of a Construction Environment Management Plan (CEMP)
- Implementation of an Operational Environment Management Plan (OEMP)
- Prevention of unnecessary clearance of vegetation during construction
- Retain small shrubs and groundcover across the site where possible.
- Avoid works beyond the boundaries of the approved area including vehicle entry, personnel entry, storage of goods and materials and stockpiling of topsoil or cleared vegetation.
- If required, an application will be made for the clearance of native vegetation in accordance with the Native Vegetation Act 1991.
- Utilise procedures to restrict the spread of weed and pest species from the subject site.
- Rehabilitate areas that no longer need to be cleared of vegetation; and



- Develop and implement a rehabilitation and revegetation program post-construction.
- Monitor the health of vegetation on-site, in particular, how the shading of the solar panels impacts vegetation communities;
- A detailed assessment will be conducted prior to detail design and again during construction to mitigate areas of subject to Threatened species, if any.

5.1.2. FAUNA

IMPACTS

During construction period the region with high habitat will be avoided. Some direct mortality of fauna such as lizards and small mammals and kangaroos may occur during construction, from collision with machinery or vehicle or entrapment in trenches and excavations. Where excavations are planned to be left open and represent a fauna entrapment risk, escape routes for fauna will be provided or alternatively they will be checked regularly for trapped fauna. An appropriately training and licenced fauna catcher will then relocate the animal.

The potential impacts of the physical structure also needs to be considered, these are potential collision of birds with structures. The potential for bird species to collide with construction cranes or new poles is considered highly unlikely.

Hairy-nosed Wombats are present in the central area of the site and evidence of wombat presence was noted during the site visit. Wombat numbers in parts of the SA Murray-Darling Basin appear to have increased in recent years and they have been observed in areas where historically they have not been seen. Construction and operations staff will to trained to avoid / give way to wombats.

MANAGEMENT AND MITIGATION

Management and mitigation measures for fauna values are developed to achieve the following outcomes:

- Minimise vegetation clearance as related/discussed in flora
- Ensure that where excavations are to be left open and represent a fauna entrapment risk, escape routes are provided or the excavations are checked regularly to release trapped fauna.
- Minimise the lighting needed to minimise the attraction of insects or birds such as bats
- Undertake any active wombat management (if required) in consultation with an ecologist and the NRM Board.
- During operation the impacts will be monitored and actions needed to be taken to mitigate it and studies to be done.
- CEMP will do a detailed assessment prior to detail design and construction to mitigate the areas of Threatened species, if any.

5.1.3. HERITAGE

IMPACT

A desktop heritage assessment and Aboriginal archaeological survey of the subject site was completed to determine the presence of non-Aboriginal and Aboriginal archaeological material



within the boundaries of the subject site. The subject site has been assessed as being of low Aboriginal archaeological sensitivity due to the lack of temporary or permanent water sources. In addition, the site has been subject to moderate to high ground disturbance through pastoral, agricultural and industrial use.

It is anticipated that the Project will have no impact on known Indigenous or non-Indigenous heritage. Unidentified Indigenous and non-Indigenous cultural heritage sites and objects have the potential to occur and may be damaged during ground disturbance associated with construction and operation of the Project. the probability of encountering a site or object of significance within the Project area is minimal, as the area contains no rock outcrops, prominent hills or ridgelines which might obscure any such site or object from view.

Should the development require any areas of ground disturbance outside of the survey coverage, additional heritage assessment would be undertaken for these areas.

MANAGEMENT AND MITIGAITON

Management and mitigation measures for heritage values are developed to achieve the following outcomes:

- If any unexpected objects or skeletal remains that may be of heritage significance are identified during the construction period, stop work procedures will be implemented such as Stop Works, Restrict Access, assess object/ site, manage the area and access.
- For Assess object/ site a suitably qualified Aboriginal Monitor or Archaeologist to assess the archaeological material and advise on nature and significance. Contact the local Police if suspected human remains have been discovered.
- During construction phase minimise vegetation clearance as far as practicable through design, layout and controls during construction.
- Avoid any areas or locations of heritage significance during the design stage and construction stage, this will be implemented via the Construction Environment Management Plan

Solar River project will produce a CEMP with a detailed risk and mitigating implementation issues and risks register. This will manage and mitigate issues and risks that occurs during the projects construction.

5.2.TRAFFIC MANAGEMENT

As previously submitted and approved

6. CONCLUSION

The Solar River Project is a Crown Developed Approved Project. It is a key renewable energy and storage project which will deliver additional capacity of 200 MW of clean renewable energy and 120 MWh of grid connected advanced battery storage into South Australia, creating hundreds of jobs for South Australians, resulting in an emission saving of approximately 360,000 tonnes a year of carbon dioxide. This variation to the approved development application has outlined the associated infrastructure required to economically connect the project to the national grid converting a short section of underground cable near the existing ElectraNet Substation to an overhead transmission line.

This document provides a detailed description of the Project variation, and a justification for same, consideration of the Project's likely impacts and an assessment against South Australian legislation and key criteria of the Development Plan. The variation will further firm project viability using the Public Infrastructure provisions under Section 49 of the Development Act and the Assessment Manager will be the independent DAC.

Offset vegetation will be considered either through third party payment or rehabilitation zone. No significant species are known at the site and management and mitigation plan will be implemented for noise, air, health and safety, ecology and heritage throughout the project from detailed design, construction to operation. Solar River project will produce a CEMP with a detailed risk and mitigating implementation issues and risks. This will manage and mitigate issues and risks that occurs during the project. This will be reviewed periodically.

The impact assessment identified various environmental, cultural, social and economic benefits from the Project and confirmed that adverse impacts could be appropriately managed. With the implementation of mitigation and management measures identified in this Development Application,

Impacts related with geology, topography, soils, surface water, landscape and visual amenity, cultural heritage, social, economic and traffic are expected to be minimal. The development of the electrical infrastructure is beneficial for South Australians

It is considered that the project exhibits sustainable planning merit and is consistent with the intention for the locality outlined in the Development Plan. In particular it represents establishment of renewable energy facility that supports and envisioned by National and State strategic policies. There are no significant impacts likely to adjacent land use or soil and water resources.

The Solar River Project - Development Application Variation #1

7. REFERENCES

As submitted previously

The Solar River Project Development Application - Number 010/V082/17

8. APPENDIX

Appendix A- Variation Design Layout

Appendix B- SRP View Shed Analysis

Appendix C- Aboriginal Affairs & Reconciliation Letter – AAR V2018 - 000789

Solar

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9. ATTACHMENTS



Other supporting Attachments as submitted previously

AARV2018/000789 File No. AAR2018/000011 HIT0249

27 July 2018

Aju Yeldhose Project Manager The Solar River Project Pty Ltd, ThincLab Ground Floor/10 Pulteney St, ADELAIDE SA 5000



Government of South Australia Department of the Premier and Cabinet Solar

River

Projec

Aboriginal Affairs & Reconciliation GPO Box 320 Adelaide SA 5001 DX 452 Tel 08 8226 8900 Fax 08 8226 8999

Dear Aju

Thank you for your correspondence (email) dated 19 July 2018, regarding the proposed works area for the solar river project near Robertstown. The search was based on the provided parcel details CT 5443/611, CT 5222/946, CT 5427/171, CT 5620/189, CT 5620/188, CT 5561/287, CT 5970/794 and CT 5689/928.

I advise that the central archive, which includes the Register of Aboriginal Sites and Objects (the Register), administered by the Department of the Premier and Cabinet, Aboriginal Affairs and Reconciliation (DPC-AAR), has no entries for Aboriginal sites within the project area.

The applicant is advised that sites or objects may exist in the proposed development area, even though the Register does not identify them. All Aboriginal sites and objects are protected under the *Aboriginal Heritage Act 1988* (the Act), whether they are listed in the central archive or not. Land within 200 metres of a watercourse (for example the River Murray and its overflow areas) in particular, may contain Aboriginal sites and objects.

Pursuant to the Act, it is an offence to damage, disturb or interfere with any Aboriginal site, object or remains (registered or not) without the authority of the Minister for Aboriginal Affairs and Reconciliation (the Minister). If the planned activity is likely to damage, disturb or interfere with a site, object or remains, authorisation of the activity must be first obtained from the Minister under Section 23 of the Act. Section 20 of the Act requires that any Aboriginal sites, objects or remains, discovered on the land, need to be reported to the Minister. Penalties apply for failure to comply with the Act.

It should be noted that this Aboriginal heritage advice has not addressed any relevant obligations pursuant to the Native Title Act 1993.

Please be aware in this area there are various Aboriginal groups/organisations/traditional owners that may have an interest, these may include:

NGADJURI NATION ABORIGINAL CORPORATION

Chairperson:	Quenten Agius
Address:	46 Maitland Road POINT PEARCE SA 5573
Mobile:	0429 367 121
Email:	Traditionalowners@adjahdura.com.au

If you require further information, please contact the Aboriginal Heritage Team on telephone (08) 8226 8900 or send to our generic email address <u>dpc-aar.heritagesites1@sa.gov.au</u>

Yours sincerely

La

Perry Langeberg SENIOR INFORMATION OFFICER (HERITAGE) ABORIGINAL AFFAIRS & RECONCILIATION

The Solar River Variation of 5.6Km Layout







The Solar River Project View Shed Analysis Replace Underground Cable with Overhead Poles Wires Lower Bright Road Robertstown

Date of issue: 1st July 2018 Revision date: 27th July 2018 Author: Aju Yeldhose



Terowie Laura Jamestown Gladstone Jooloo Crystal Brook Spalding Mount Bryan Koolunga Broughton Burra Bungaree Snowtown kera A22 Clare Bute Powerline location Sevenhill Bumbunga Mintaro Watervale lina Robertstown Cadell Point Pass Murbko Overland Corner Balaklava Eudunda Riverton Port Wakefield Waikerie Barme

Solar River Project







View of Lower Bright Road





View Lower Bright Road

Note:

- 1. Care has been taken to avoid sensitive areas. Detailed design will consider and avoid sensitive areas.
- 2. For road safety and reduced visual impact care has been taken to avoid poles road ways.
- 3. Care has been taken to avoid homes and native vegetation.
- 4. There are No poles located on public roads.
- 5. The line will be constructed 100% on private land average distance half a kilometre from any public road.
- 6. The line avoids all residential dwellings.
- 7. The line will be constructed in an area with two existing transmission lines.
- 8. The line has been design to limit visual impact from public road or public vantage points.
- 9. Effected land owners have been consulted.
- 10. The poles will be grey in colour.
- 11. View shed at road crossings included in the attached.
- 12. The Array is not visible to the general public.

AARV2018/000789 File No. AAR2018/000011 HIT0249



27 July 2018

Aboriginal Affairs & Reconciliation GPO Box 320 Adelaide SA 5001 DX 452 Tel 08 8226 8900 Fax 08 8226 8999

Aju Yeldhose Project Manager The Solar River Project Pty Ltd, ThincLab Ground Floor/10 Pulteney St, ADELAIDE SA 5000

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Chairperson:	Quenten Agius
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If you require further information, please contact the Aboriginal Heritage Team on telephone (08) 8226 8900 or send to our generic email address <u>dpc-aar.heritagesites1@sa.gov.au</u>

Yours sincerely

Rglq

Perry Langeberg SENIOR INFORMATION OFFICER (HERITAGE) ABORIGINAL AFFAIRS & RECONCILIATION



10th September 2018

Laura Kerber Senior Planning Officer – Major Development and Crown Development Division Department of Planning, Transport and Infrastructure (DPTI) 77 Grenfell St, Adelaide SA 5000

The Solar River Project Pty Ltd 10 Pulteney Street, Adelaide -5000

RE: Variation on Development Number:010/V082/17 V1

Dear Laura,

Please find The Solar River Project response to the information request by DPTI on 20/08/2018 regarding the Variation to DA 010/V082/17 The Solar River Project: portion of underground transmission line varied to an overhead powerline

Confirmation regarding the subject site. Pg 12 of the Application Report includes Lot 221 (Section 229) CT 5561/287 which is a land parcel located north of Lower Bright Road and does not appear to be impacted by the proposed powerline. Please confirm how this allotment is involved in the development.

Lot 221 (Section 229) due to design rationalisation is no longer involved in the development.

2. Pg 9 makes reference to two (2) powerline distances – 5.3km and 5.6km. Please confirm the length of overhead powerline.

SRP Confirms that the length of the overhead line associated with this variation application is 5.6km

3. Pg 9 makes reference to a 50m line easement and a 100m line corridor. Pg 11 makes reference to a 60m easement to avoid trees and sensitive areas. Please provide clarification of these measurements and further information on the relationship between them.

The reference to the line easement should be amended to 50 metres. SRP confirms a 100-metre design corridor.

- 4. An additional site / layout plan which clearly demonstrates the relationship of the proposed powerline, pole locations, impacted land parcels, and existing patches of native vegetation. This plan should include:
 - -identification of the affected allotments (parcel IDs)
 - -road names and substation location
 - -proposed transmission route including indicative pole locations
 - -the '100m approval buffer'
 - -overlaid on aerial imagery



** this plan would essentially be an amalgamation of the information shown on the main layout plan as well as Figure 2, 4, 5 and Pg 5 of the view shed analysis (pole locations and aerial)



Figure 1: The parcel lot numbers in yellow, proposed Transmission line route and Pole location

PARCEL IDENTIFIER	LOT NUMBER	PROPERTY ST NAME	PROPERTY SUBURB	TITLE
D51338AL50	Lot 50	Lower Bright	Bright	CT5689/927
D51338AL51	Lot 51	Govt	Bright	CT5689/928
H200300SE9	Lot 9	Lower Bright	Bright	CT5970/794
D51041AL102	Lot 102	Eagle Hawke Gate	Bright	CT5620/188
D51041AL103	Lot 103	Lower Bright	Bright	CT5620/189
H200300SE11	Lot 11	Lower Bright	Geranium plains	CT5427/171
H200300SE12	Lot 12	Lower Bright	Geranium plains	CT5222/946
H200300SE228	Lot 228	Lower Bright	Geranium plains	CT5443/611

The 100metre buffer is 50 metres either side of the transmission line (centre line) as detailed in Fig 1.

All of the above-mentioned parcel owners are stakeholders of The Solar River Project, they have shown their support for the project. Note (Confidential) Section 51 land owner has not signed with SRP as ElectraNet seek to purchase this land. SRP will enter into an arrangement with ElectraNet.

5. Indicative heavy vehicle route to the subject site and any required road upgrades.

The vehicle route for any materials transfer will be as per the CEMP traffic management plan. Note SRP is committed to funding support via Goyder Council for any road upgrades if needed. The key transport route is identified in Appendix B

6. The subject site includes areas of native vegetation (particularly Sections 11 and Section 12). Further information is requested on how the project will be designed and managed to minimise the extent of clearance and/or disturbance, including:

Table 2 provides a description of the vegetation community which may be impacted by the development. Further information is requested on the conservation value / importance of this community: Is it protected? Does it provide habitat for local flora / fauna? It is intact? The areas identified for construction are heavily disturbed. Kleinfelder Australia have been engaged to verify the preliminary findings in the application. The final report is expected next week, and will be issued to DPTI shortly thereafter.



- Pg 13 of the Application Report refers to a 100m approval buffer however this is not depicted anywhere. Further information is required to provide an understanding of how this buffer may be utilised to minimise vegetation disturbance. The buffer is located 50 metres either side of the proposed transmission line (50 metres from the proposed transmission line centre line)
- Pg 13 refers to a Pole Disturbance Zone how large are these areas? The Pole Disturbance Zone is 3 metres by 3 metres.
- Ongoing impact to vegetation will periodic pruning of the native vegetation be required to maintain clearance to the powerlines? If yes, to what extent is the clearance and what impact will it have on the native vegetation? No, Care has been taken to position poles to eliminate the need for vegetation pruning.
- Further information on the proposed strategies during construction to minimise disturbance
 of native vegetation how will heavy vehicles move around the vegetation etc.
 Heavy vehicles will utilise existing tracks, movements will be limited to tracks and laydown
 areas detailed in this application, movements will be controlled in accordance with the CEMP.
- 7. Where is the proposed location for the temporary site compound (indicative only). Appendix A shows the laydown area (Marked in blue shaded boxes) for each pole during construction, this area is approximately 20 metres by 20 metres. Care has been taken to avoid native vegetation.

Please contact me if you have any further questions.

Yours Faithfully

Jason May Managing Director **The Solar River Project** E jason@maybros.net Mobile 0499 365 086 International +61 499 365 086

Appendix A















Appendix B



Port Adelaide

South Australia 5015

Take Church PI to Nelson St				
ţ	1.	Head north towards Quebec St	51 s (210 m)	
ħ	2.	Turn left onto Quebec St	34 m	
r*	3.	Turn right onto Church Pl	18 m	
			160 m	
Take	A9, I	National Highway A1, Northern Expy/National Highway M20 and Thiele Hwy/B81 to Gunn St/Worlds End Hwy in Eudunda	1 h 14 min (104 km)	
٦	4.	Use any lane to turn slightly left onto Nelson St	700 m	
r*		Use the right 2 lanes to turn right onto Port River Expy/A9 Continue to follow A9		
*	6.	Use the left lane to take the National Hwy A1/Pt Wakefield Rd slip road to Pt Wakefield	9.9 km	
*	7.	Merge onto National Highway A1	500 m	
ħ	8.	Keep left to continue on Northern Expy/National Highway M20, follow signs for National Hwy M20/Gawler/Renmark	11.4 km	
t	9.	Continue onto National Highway A20	22.2 km	
*	10.	Use the left lane to take the Horrocks Hwy slip road to B82	2.5 km	
ħ	11.	Turn left onto Horrocks Hwy/Main N Rd/A32		
rt.	12.	Turn right onto Thiele Hwy/B81	450 m	
r	13.	Turn right onto East Terrace	27.7 km	
rt.	14.	Turn right to stay on East Terrace	1.6 km	
rt.	15.	Turn right onto Elizabeth St/Thiele Hwy/B81 Continue to follow Thiele Hwy/B81	2.1 km	
			24.7 km	



Continue on Worlds End Hwy. Drive to Lower Bright Rd in Geranium Plains

COIII	Contrinue on monitors and may, other to Lower origin, ha in Geranian Frains		
٦	16.	Turn left onto Gunn St/Worlds End Hwy Continue to follow Worlds End Hwy	29 min (34.1 km)
rt.	17.	Turn right onto Commercial St/Worlds End Hwy Continue to follow Worlds End Hwy	5.2 km
r.	18.	Turn right onto Powerline Rd	5.2 km
r	19.	Turn right onto Lower Bright Rd	6.2 km

Lower Bright Rd South Australia 5381