Submissions Report

NYNGAN SOLAR PLANT

JUNE 2013

Document Verification

Project Title:	Nyngan Solar Plant
Project Number:	4554
Project File Name:	Nyngan Solar Plant Submissions Report Final v1.1.docx

Revision	Date	Prepared by (name)	Reviewed by (name)	Approved by (name)
Draft v1.0	17/05/13	Amy Halliday Brooke Marshall	Brooke Marshall	Brooke Marshall
Final v1.0	20/05/13	Amy Halliday	Nick Graham-Higgs	Nick Graham-Higgs
Final v1.1	4/06/13	Amy Halliday	Nick Graham-Higgs	Nick Graham-Higgs

nghenvironmental is a registered trading name of NGH Environmental Pty Ltd; ACN: 124 444 622.

ABN: 31 124 444 622

suite 1, 216 carp st (po box 470) bega nsw 2550 australia t 61 2 6492 8333

www.nghenvironmental.com.au e ngh@nghenvironmental.com.au

po box 434
bathurst nsw 2795 australia
0488 820 748

unit 18, level 3, 21 mary st
surry hills nsw 2010 australia
t (02) 8202 8333

suite 1, 39 fitzmaurice st (po box 5464)
wagga wagga nsw 2650 australia
t (02) 6971 9696

unit 17, 27 yallourn st (po box 1037)
fyshwick act 2609 australia
t (02) 6280 5053

37 peron ave (po box 1037)
dunsborough wa 6281 australia
(08) 9759 1985

CONTENTS

TABLES

FIGURES

TERMS AND DEFINITIONS

AGL	AGL Energy Limited
BSC or Council	Bogan Shire Council
CdTe	Cadmium Telluride
CEMP	Construction environmental management plan
CMA	Catchment Management Authority
Cwth	Commonwealth
DGRs	Director General's Requirements
DoPI	(NSW) Department of Planning and Infrastructure
EIS	Environmental impact statement
EPA	(NSW) Environment Protection Authority
EP&A Act	*Environmental Planning and Assessment Act 1979* (NSW)
EP&A Regulation	*Environmental Planning and Assessment Regulation 2000* (NSW)
EPC	Engineer Procure Construct
ha	hectares
km	kilometre
LEP	Local Environment Plan
m	metres
MW	Megawatt
MWh	Megawatt hours
NSW	New South Wales
OEH	(NSW) Office of Environment and Heritage, formerly Department of Environment, Climate Change and Water
Proponent	The person or entity proposing a development, in this instance, AGL.
PV	Photovoltaic
RMS	(NSW) Roads and Maritime Services, formerly Roads and Traffic Authority (RTA)
SEPP	State Environmental Planning Policy (NSW)
SEPP (Infrastructure)	*State Environmental Planning Policy (Infrastructure) 2007* (NSW)
SRD SEPP	*State Environmental Planning Policy (State and Regional Development) 2011 (NSW)*
SSD	State Significant Development, as defined by section 89C of the EP&A Act *(c.f.)*
The proposal	The Nyngan Solar Plant project, including the construction, operation and decommissioning of the Nyngan Solar Plant, as further described in Section 3 of the EIS and Section 2 of this document.
WMP	Waste Management Plan

1 INTRODUCTION

1.1 BACKGROUND

The Nyngan Solar Plant is proposed in Central West New South Wales, approximately 10 kilometres west of the Nyngan township (refer Figure 1-1) on the Barrier Highway. The Nyngan Solar Plant proposal encompasses the construction, operation and decommissioning of a solar photovoltaic (PV) array over approximately 300 hectares of a 460 hectare site on privately owned agricultural land, and a transmission line easement approximately 3 kilometres long by 40 metres wide.

The proposal requires development consent under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The NSW Minister for Planning and Infrastructure is the Consent Authority. The proposal is considered State Significant Development (SSD) as it is development for the purpose of electricity generating works with a capital cost of greater than $30 million (clause 20, Schedule 1 of the *SEPP (State and Regional Development) 2011*).

AGL Energy Limited (AGL) is the proponent of the Nyngan Solar Plant. AGL is the largest private owner, operator and developer of renewable generation in Australia and has invested over $2 billion in renewable energy projects. AGL owns and operates hydro, wind, solar, biomass, landfill gas and conventional fossil fuel generation facilities, and owns a retail electricity and gas businesses with over 3.5 million customer accounts.

An Environmental Impact Statement (EIS), prepared by **ngh**environmental, was submitted to the NSW Department of Planning and Infrastructure (DoPI). The Director-General's Requirements for the preparation of the EIS included investigation of key environmental issues including:

- Biodiversity
- Aboriginal cultural heritage
- Visual amenity
- Noise
- Hydrology (flooding)

Investigation of these issues formed the major focus of the EIS. These issues were investigated via specialist reports and by desktop assessment.

The EIS was placed on public exhibition from 14 March to 15 April 2013. During this period, submissions were sought from the local community, government agencies, interested parties and other stakeholders.

1.2 PURPOSE OF THIS REPORT

This Submissions Report has been prepared by AGL and **ngh**environmental to fulfill the requirements of Section 75H of the *Environmental Planning and Assessment Act 1979*. The purpose of the Submissions Report is to:

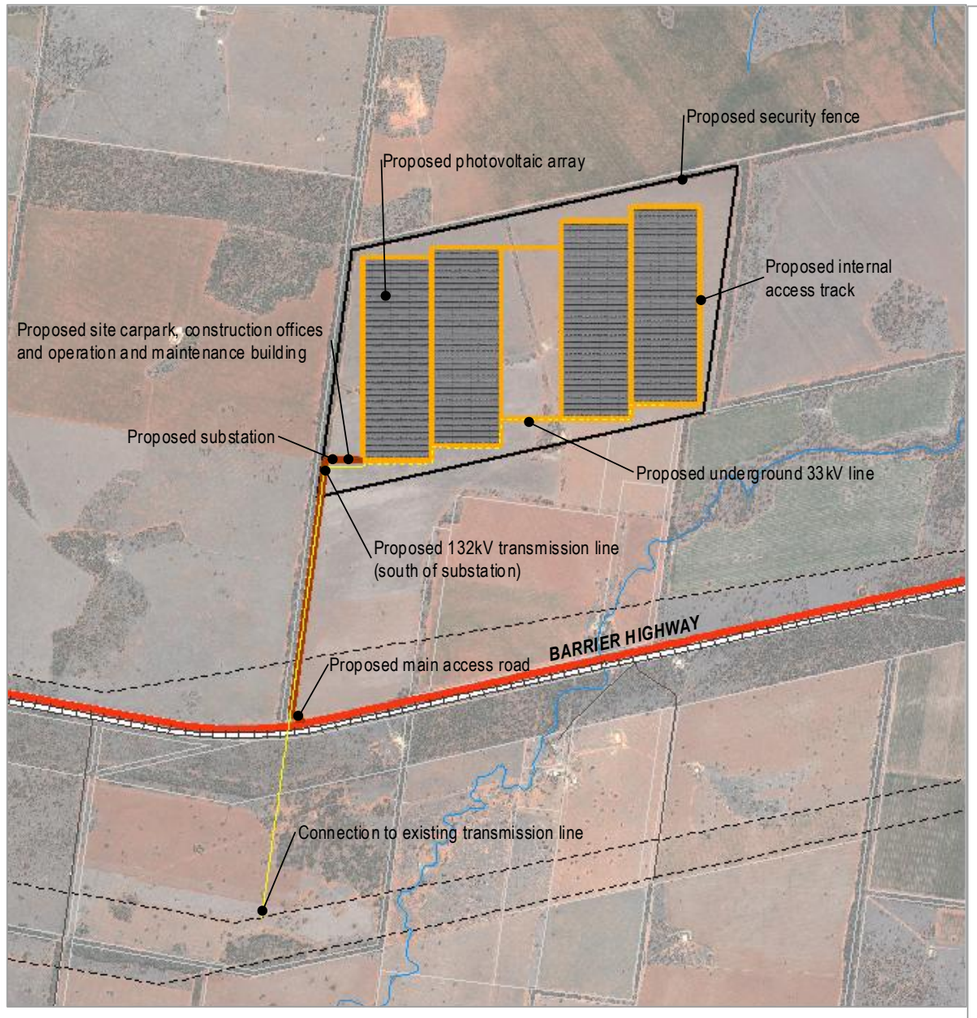
- Consider and respond to the issues raised in the public and agency submissions for the Nyngan Solar Plant.
- Describe any changes to the proposal, including a revised set of proposed mitigation measures.

SITE LOCATION RELATIVE TO NYNGAN

0 5 10 20 Kilometres

Notes:
- Infrastructure locations are approximate only
- Other base layers from LPI, accessed 2012
- Aerial base layer from Bing (ESRI Online) accessed 2012

SITE LAYOUT



0 0.5 1 2 Kilometres

Notes:
- Infrastructure locations are approximate only
- Other base layers from LPI, accessed 2012
- Aerial base layer from Microsoft Virtual Earth accessed 2012

Proposed transmission line
- 132 kV
- Underground 33 kV

Proposed roads and tracks
- Internal access track
- Main access road
- Development site (fenced)
- Rail
- Highway
- Built up area (Nyngan)
- Road
- Existing transmission line

Ref: 4554v1.4 VIA
Author: SP

www.nghenvironmental.com.au

Figure 1-1 Location and layout of the proposal

2 THE PROPOSAL

2.1 SUMMARY OF THE PROPOSAL

The Nyngan Solar Plant proposal remains as described in the Environmental Impact Statement (**ngh**environmental, 2013), with the exception of minor changes noted in Section 2.1.1.

AGL proposes to construct and operate a solar plant with a capacity of up to approximately 106 MW in Central West NSW, approximately 10 kilometres west of the Nyngan township. The solar plant would be located on one land parcel (Lot 34 DP 751328) north of the Barrier Highway covering approximately 300 hectares within a total lot area of approximately 460 hectares. The site is largely cleared with some small remnant patches of degraded native vegetation and scattered trees. It is currently used for agriculture (cropping and grazing).

A transmission line would be constructed to connect the solar plant to the existing electricity network. The transmission line would be approximately 3 kilometres in length and traverse seven land parcels:

- Three private rural land holdings (Lot 34 DP 751328, Lot 24 DP 751328 and Lot 8 DP 724628).
- The Barrier Highway Road Reserve (owned by the Bogan Shire Council, with the road itself managed by the NSW Roads and Maritime Services).
- A Crown Land parcel (Lot 7300 DP 1156652) owned by the NSW Department of Primary Industries and Catchment & Lands Division, and managed as a Travelling Stock Reserve (TSR 26457).
- A parcel (Lot 25 DP 1181299) owned by Transport for NSW[1] and managed by John Holland Rail Pty Ltd, which contains the rail line.

The transmission line easement would be 40 metre wide and would cover an area of approximately 14 hectares.

Key infrastructure components proposed at the site include:

- Arrays of photovoltaic (PV) modules utilising cadmium telluride (CdTe) thin film technology.
- Inverters, transformers and underground electrical conduits and cabling within the arrays.
- A substation.
- An operations and maintenance building.
- Internal tracks.
- An approximate 3 kilometre transmission line.
- An approximate 1.6 kilometre access road off the Barrier Highway.

The solar plant is expected to have a 30 year operating life. Decommissioning would remove all above ground infrastructure, rehabilitating the site to allow for a return to agricultural or other land use.

The main components of the proposal are described in Section 3 of the EIS.

[1] This parcel was converted from Old System to Torrens title in November 2012, and was not specifically identified in the EIS as exhibited.

2.1.1 Proposal changes

The following minor changes to the proposal are noted.

Table 2-1 Changes to the proposal

EIS description	New description	Notes
Transmission line crosses 6 land parcels: • Three private rural land holdings (Lot 34 DP 751328, Lot 24 DP 751328 and Lot 8 DP 724628). • The Barrier Highway Road Reserve (owned by the Bogan Shire Council, with the road itself managed by the NSW Roads and Maritime Services). • A Crown Land parcel (Lot 7300 DP 1156652) owned by the NSW Department of Primary Industries and Catchment & Lands Division, and managed as a Travelling Stock Reserve (TSR 26457).	Transmission line crosses 7 land parcels, the existing 6 parcels identified in the EIS and additionally: • A parcel (Lot 25 DP 1181299) owned by Transport for NSW and managed by John Holland Rail Pty Ltd, which contains the rail line.	The additional parcel was converted from Old System to Torrens title in November 2012, and was not specifically identified in the EIS as exhibited.
The operations and maintenance building would be an ATCO hut or similar with approximate floor space of 75m^2.	The operations and maintenance building would be an ATCO hut or similar with approximate floor space of 100m^2.	O&M building footprint has increased by 25m^2, however, it is noted that no additional area outside that already assessed in EIS would be impacted.
Main access track: An existing farm track is currently present in this location, but may require improvement with crushed rock.	Main access track: Additional detail provided in response to Council submission: AGL would construct the site access road to the appropriate standard for a 25 year design life. The road shall be constructed with an appropriate capping layer to prevent mud, gravel and dirt from being dropped onto the highway.	Additional mitigation measures provide that the access track intersection would be constructed in accordance with RMS requirements.

EIS description	New description	Notes
Worker accommodation: A work camp for construction workers is not proposed.	Worker accommodation: A temporary work camp to accommodate construction workers is proposed within the levee bank area of Nyngan township.	A temporary work camp is now proposed. Approval for the construction of the work camp accommodation and associated facilities will be sought from Council, separate to the solar plant approval process. Upon completion of construction of the solar plant, the work camp would be remediated and the land returned to its current condition.
Mitigation measures listed in section 8.2 of the EIS	Revised mitigation measures as listed in Appendix A of the submission Report.	Revised mitigation measures address potential impacts identified in the EIS and issues raised during the submissions process.

2.2 PROJECT BENEFITS

The Nyngan Solar Plant would provide power to supply an estimated 33,000 average NSW homes, based on average NSW consumption of 7 MWh per year and an estimated annual production from the plant of 231,000 MWh per year. The solar plant would assist to:

- Demonstrate that large scale solar power plants can be constructed and operated within major electricity grids in Australia.
- Optimise the business models for constructing, generating and wholesaling electricity generated from large scale solar power plants.
- Develop the solar power industry and supply chain in Australia.
- Develop Australian intellectual property and know-how in solar power.
- Avoid approximately 203,300 tonnes of CO_2 equivalent per annum, by replacing fossil fuel based energy with solar generated energy.
- Assist in meeting NSW and Australian Government targets for renewable energy generation and reductions in greenhouse gas emission.

Specific to community benefits, the solar plant would:

- Generate an estimated 300 local jobs at peak construction and encourage regional development.
- Maximise the use of local contractors, manufacturing facilities and materials during construction, through liaison with local industry representatives.

In addition to socioeconomic and employment benefits, the local community would benefit from AGL's ongoing support for community activities, which to date have included:

- Lead sponsor of the Nyngan Ag Expo for 2013 and 2014.
- Sponsor of the Bogan Shire Christmas Lights competition.
- Sponsor of the Nyngan Swimming Club Business House Relay.
- Sponsor of a young athlete participating in the U15 NSW Indigenous Schoolgirls Netball Team.

3 CONSIDERATION OF SUBMISSIONS

3.1 EXHIBITION AND LOCATION

The Nyngan Solar Plant EIS public exhibition period extended from Thursday, 14 March to Monday, 15 April 2013. Printed copies of the EIS were available at the following locations during the exhibition period:

- Bogan Shire Council, 81 Cobar Street, Nyngan.
- Bogan Shire Library, 73 Cobar Street, Nyngan.
- Department of Planning & Infrastructure, Information Centre, 23 – 33 Bridge St, Sydney, NSW.
- Nature Conservation Council of NSW, 2/5 Wilson St, Newtown.

Electronic copies of the EIS were also available online at the following websites:

- majorprojects.planning.nsw.gov.au/page/on-exhibition
- http://agk.com.au/nyngan/index.php/news

Local residents were notified of the exhibition period through newspaper advertisements placed in the local paper (the Nyngan Observer) by AGL on 20 March and 27 March 2013. DoPI also placed an advertisement in the paper announcing the exhibition period on 13 March 2013.

Additionally, AGL held a community information session to provide information about the EIS and the submission process on 3 April 2013 at the Nyngan RSL.

3.2 RESPONSES RECEIVED

DoPI received a total of 9 submissions during the exhibition period. One submission was received from an individual member of the public and 8 submissions were received from government agencies. No submissions were received from special interest groups.

Table 3-1 Responses received

Category	Number of responses received
Individual members of the public	1
Interest groups	0
Government agency submissions • **NSW Trade & Investment, Resources and Energy Division** • **NSW Transport, Roads and Maritime Services** • **Central West Catchment Management Authority** • **Office of Environment and Heritage** • **Bogan Shire Council** • **NSW Department of Primary Industries, Catchment & Lands Division** • **NSW Department of Primary Industries, Office of Water** • **NSW Department of Primary Industries, Fisheries, Forestry and Agriculture divisions**	8
Total	**9**

4 PROPONENT'S RESPONSE TO COMMUNITY SUBMISSIONS

For each submission, the key issues are summarised in the left hand column. A more in-depth account of the issue is provided in the right hand column, followed by the proponent's response.

Where new or amended mitigation measures are proposed, mitigation measure numbering in the table below reflects the revised numbering as set out in Appendix A, with the old mitigation measure numbering used in the EIS presented in square brackets [ ] for cross-referencing purposes.

Issue	Detail and response
Local accommodation and contractors	The respondent acknowledges that a positive impact for the Nyngan community is likely to result due to the involvement of local contractors and use of local accommodation. AGL response As identified in the EIS, the proponent intends to use local accommodation and contractors to the extent possible. Specifically, in terms of community benefits, the proposal would: • Generate an estimated 300 local jobs at peak construction and encourage regional development. • Maximise the use of local and regional contractors, manufacturing facilities and materials during construction, through liaison with local industry representatives. • Use local accommodation providers where appropriate (also refer responses regarding accommodation in Section 5.5). Additional benefits of the proposal are identified in Section 2.2 above. No changes to the EIS mitigation measures are proposed.
Consultation with respondent	The respondent expressed disappointment the company undertaking the EIS had no communication with the respondent. AGL response A community consultation process was implemented in relation to the proposal. AGL met with the respondent on 29 August 2012 to discuss the project. The results of consultation were considered and incorporated into the EIS where appropriate. AGL sent a letter to the respondent dated 20 March 2013 providing information about AGL's community information session on 3 April 2013 at the Nyngan RSL. AGL also placed ads in the Nyngan Observer on 20 March and 27 March 2013 announcing the community information session. No changes to the EIS mitigation measures are proposed.

Issue	Detail and response
Loss of amenity	The respondent stated that his property is the closest non-involved residence and his property would adjoin the proposed substation and site office and would experience most of the increased traffic and potential disruption to quiet enjoyment. AGL response The proposed solar plant site (Lot 34 DP 751328) and the transmission line easement do not directly adjoin land owned by the respondent (vacant property on Lot 3 DP 751310). Cadastral mapping shows that there is a land parcel, understood to be an undeveloped road reserve owned by the Bogan Shire Council, which separates the properties. The road reserve is approximately 40 metres wide and is located within a 100 metre wide treed corridor, which would prevent views of the solar plant from the currently vacant property. The respondent's residence is located on Lot 5 DP 751310, approximately 2.8 kilometres south-west of the south-western boundary of Lot 34 DP 751328. AGL conducted noise, visual and traffic assessments that evaluated the impact to nearby properties, including the home of the respondent. The noise assessment found that noise levels during construction at the respondent's residence would be 36 dBA (i.e. 8 dBA below the relevant Noise Management Level of 44 dBA). During plant operation, noise generated by the substation, and aeolian and corona noise generated by the transmission line, would be expected to be inaudible at this residence, while noise from maintenance activities would be below the levels required by the *NSW Industrial Noise Policy*. The visual assessment found that the solar plant would not be visible from the respondent's house given the distance and the presence of two separate stands of trees between the house and the project site. The traffic assessment found that potential impacts from traffic generated during plant construction could be minimised with appropriate mitigation (refer Appendix A for traffic related mitigation measures). The access point for the solar plant would be located approximately 2.5 kilometres east of the respondent's driveway. The intersection of the solar plant access road with the Barrier Highway would be upgraded in accordance with RMS requirements to reduce the impact on traffic in this area. During plant operations, ongoing levels of traffic would be low (about 6-8 trips[2] per day based on 3-4 operational and maintenance staff) and would not impact traffic along the highway.
Marketability of adjoining properties and home site locations	The respondent expressed concern regarding the potential for the proposal to have a negative impact on the marketability of adjoining properties and on the location of home sites and the value of adjoining land. AGL response **Value and marketability of adjoining land** The key driver of land value in the local area is considered to relate to agricultural productivity. Amenity values, such as views and opportunities for recreational activities could also be considered to enhance land value. As identified in Section 7.4.1 of the EIS, the economy of the Bogan Local Government Area is based on agricultural production and land surrounding the proposal site is zoned RU1

[2] A 'trip' is a one way vehicle movement, hence return travel of one vehicle is noted as two trips.

Issue	Detail and response
	Primary Production (with the exception of the Barrier Highway, which is zoned SP2 Infrastructure - Classified Road). The proposal would not impact on the ability of adjoining land to be used for agricultural production in any way, nor would it impact on the agricultural productivity of the land upon which the proposal may be constructed, in the longer term. That is, while infrastructure would affect the stock carrying capacity and area able to be cropped of the proposal site during the operational phase of the projects, at decommissioning, all above ground infrastructure would be removed and current agricultural activities could resume. The proposal is reversible and would not permanently impact on the ability of the proposal site itself to be used for agricultural production. Potential noise and visual impacts were examined in Sections 6.5 and 6.6 of the EIS, respectively, in relation to existing residential receivers. Potential noise impacts on sensitive receivers would be largely temporary and restricted to the construction phase. Noise modelling indicated that receivers would not be impacted above the levels recommended in the *NSW Interim Construction Noise Guidelines*. During operation, noise impacts outside the solar plant site and transmission line would not impact on sensitive receivers above the guidelines recommended in *NSW Industrial Noise Policy*. Proposed noise mitigation measures included in Section 8.2 of the EIS would reduce the potential for noise amenity impacts on adjacent land, including land where houses or other sensitive land uses are not currently located. Regarding visual impacts, the solar plant site is unlikely to be visible from adjoining land given the low profile of the solar array infrastructure and given the proposed solar plant site is surrounded by existing screening vegetation, which would be supplemented by additional plantings along the southern boundary and in vegetation gaps along the Barrier Highway. Existing screening vegetation includes treed corridors about 100 metres wide on the western side, and about 50-60 metres wide on the northern and eastern sides. Transmission line structures (poles and wires) would be visible from the Barrier Highway above the trees, but impacts would be low as views to the proposed transmission line would generally be of short duration and seen from moving vehicles. Views of the transmission line from existing residences are blocked or partially screened by vegetation. Transmission line structures may be visible from some adjoining land, but would not be a dominant feature in the visual landscape given partial screening of vegetation. No land value study has been undertaken specific to this solar plant development. Existing studies in relation to wind farms (which are generally larger renewable energy developments, with taller structures which are generally more visually intrusive on the landscape than a solar plant, but which have the same temporary and reversible impacts on agricultural productivity), have found no conclusive evidence to support the claim that wind farms devalue nearby property on the basis of visual impacts (e.g. refer Henderson & Horning Pty Ltd 2006 *Land Value Impact of Wind Farm Development - Crookwell New South Wales*). Therefore, there is no evidence to support the contention that property devaluation or reduced marketability would result from the Nyngan Solar Plant proposal. The solar plant would not affect the agricultural productivity of adjoining land or have significant visual or noise impacts during operation. **Home site locations** The Nyngan Solar Plant proposal has been developed and assessed to not have significant amenity impacts on existing sensitive

Issue	Detail and response
	receivers, including existing residences. In the future, potential new home site locations on land adjoining the proposal site could be selected to avoid or minimise noise, visual or other amenity impacts from the operational Nyngan Solar Plant (refer also response to 'Quiet enjoyment of adjoining land' below). It is noted that under the Bogan LEP 2011, the minimum lot size for land zoned RU1 – Primary Production on which a dwelling may exist is 600 hectares. This is considered an ample area in which home sites could be selected without adverse amenity impacts from the solar plant. No changes to the EIS mitigation measures are proposed.
Quiet enjoyment of adjoining land	The submission concerns the potential for the proposal to have a negative impact on the quiet enjoyment of adjoining land. <u>AGL response</u> There are no available guidelines to assess impacts on non-sensitive land uses, such as recreational use of rural land. The potential for noise to affect the enjoyment of adjacent rural land would be largely restricted to the construction phase. During construction, the proponent has a responsibility to mitigate noise impacts on sensitive receivers[3], in accordance with the *NSW Interim Construction Noise Guideline*. The Noise Assessment determined there are no existing sensitive receivers located on land parcels immediately adjoining the proposal site, and that no nearby sensitive receivers are likely to be impacted above the targeted noise management levels. It is noted that rural land use is not considered to be a sensitive land use and that existing background noise sources in this location are likely to include agricultural machinery such as tractors, quad bikes, harvesters, and traffic noise from the Barrier Highway. During plant operations, potential noise impacts on neighbouring rural land would likely be minor. Operational noise would result from a small number of vehicles accessing the site per day, noise from the substation (which would dissipate with distance from the substation), aeolian and/or corona noise from transmission lines (which would be infrequent and limited to certain seasonal and meteorological conditions e.g., wind and/or high rainfall or foggy/humid conditions), and intermittent noise from maintenance activities (refer EIS Section 6.5). Potential future sensitive receivers (e.g., rural residences) on adjoining land would be established within the context of the solar plant being an existing land use, and would therefore have the opportunity to minimise potential noise related impacts in their location and design. No changes to the EIS mitigation measures are proposed.

[3] Sensitive receivers include residences, classrooms, hospitals, places or worship, passive recreation areas such as outdoor ground used for teaching, active recreation areas such as parks and sports grounds. Other land uses that may at times be sensitive to noise from construction include commercial premises, such as film and television studios, research facilities, entertainment spaces, temporary accommodation (such as caravan parks and camping grounds), child care centres, restaurants, office premises and retail spaces; and industrial premises.

Issue	Detail and response
Upgrades to infrastructure	The submission enquires about the potential for the proposal to upgrade existing boundary fences and provide power to a nearby property. AGL response **Boundary fences** It is noted that the proposed project site (Lot 34 DP 751328) does not share a boundary with the respondent's property. The proposal includes security fencing to ensure access to the substation and solar array are protected from vandalism and similarly to protect the public from accidental electrocution or other public safety risks associated with an operational electricity generating plant. It is not proposed to fence the transmission line easement, though AGL would consult with affected landholders in accordance with existing Mitigation Measure 46: *Mitigation Measure 46* [46]*: Consultation with neighbouring landholders regarding any temporary impacts to access or risks to livestock. Additional specific mitigation may be required such as:* • *Additional fencing to protect livestock from collision risks* • *Vehicle speed restrictions on access roads.* **Electricity supply** AGL is not a distributor of electrical power and supply of electricity to nearby properties is not proposed as part of the project. Essential Energy, the electrical distribution company in the Nyngan area, should be contacted regarding electricity supply. No changes to the EIS mitigation measures are proposed.
Setback of power generating facilities from residences	The submission questions whether there are any limitations regarding the distance solar plants can be constructed from residences. AGL response Setbacks, if required, are typically established following review of potential impacts identified in the project environmental assessment. For the Nyngan Solar Plant, the potential impacts of project construction and operation on the respondent's property were found to be small and within appropriate guidelines for amenity. No changes to the EIS mitigation measures are proposed.

Issue	Detail and response
Restrictions on construction of new dwellings on land near power generating facilities	The submission enquires about the potential for the proposal to restrict the approval of new dwellings on land near the Nyngan Solar Plant. AGL response The Bogan LEP 2011 and SEPP (Infrastructure) do not contain any specific restrictions for new dwellings on land adjacent to electricity generating facilities. The land adjacent to the proposal site is Zoned RU1 – Primary Production and provisions regarding development for new dwellings on that land zone would apply to any new dwellings and be unaffected by the proposal. It is noted that Section 4.2 of the LEP regarding rural subdivision prohibits new dwellings being constructed on rural lots less than 600 hectares in size. No changes to the EIS mitigation measures are proposed.
Preference for existing farming operation	The submission states a preference for an existing farming operation approved under the Local Environment Plan, given perceived negative impacts identified above. AGL response The proponent emphasises the benefits of the proposal in Section 2.2 above. Offsetting of biodiversity impacts and upgrades to road infrastructure would also have benefits in the immediate locality. While the LEP Land Use Table indicates that electricity generating works are prohibited in the RU1 – Primary Production zone, the SEPP (Infrastructure) overrides the LEP and permits electricity generating works (including solar energy systems) at the proposal site (refer EIS Section 5.2.1). The proponent considers that the perceived negative impacts discussed above are not substantive and, with the implementation of the mitigation measures included in the EIS (and updated in this Submissions Report), that the potential environmental and community impacts of the project are highly manageable. No changes to the EIS mitigation measures are proposed.

5 PROPONENT'S RESPONSE TO GOVERNMENT AGENCY SUBMISSIONS

Government agency submissions are addressed in the order received. For each submission, the key issues are summarised in the left hand column. A more in-depth account of the issue is provided in the right hand column, followed by the proponent's response.

Where new or amended mitigation measures are proposed, mitigation measure numbering used in the below tables reflects the revised numbering as set out in Appendix A. For amended measures, the old mitigation measure numbering used in the EIS is presented in square brackets [ ] for cross-referencing purposes.

5.1 TRADE AND INVESTMENT – RESOURCES AND ENERGY

Issue	Response
No concerns	The Resources and Energy branch of the NSW Department of Trade and Investment, Regional Infrastructure and Services (NSW Trade & Investment) had no specific concerns regarding mineral resources. AGL response No changes to the EIS mitigation measures are proposed.

5.2 TRANSPORT FOR NSW – ROADS AND MARITIME SERVICES

Issue	Response
Traffic Management Plan & Haulage Plan, including upgrade of access from the Barrier Highway	RMS requested that a Traffic Management Plan and a Haulage Plan should be prepared in consultation with RMS and include detail as follows: *'The access to the subject land from the Barrier Highway shall be upgraded to provide for the safe movement of traffic entering and exiting the site. In this regard, a Traffic Management Plan and Haulage Plan shall be prepared in consultation with RMS to outline measures to manage traffic related issues associated with the delivery and construction of the solar plant, ancillary structures, transportation of excavated materials, machinery and personnel involved in the construction, operation and decommissioning stages of the project. The plans shall detail the potential impacts associated with the development, the measures to be implemented and the procedures to monitor and ensure compliance. This plan shall address, but not necessarily be limited to:* *a) The origin, number, size, frequency and final destination of vehicles entering/exiting the site;* *b) Loads, weights and lengths of haulage and construction related vehicles and the number of movements of such*

Issue	Response
	vehicles; *c) The management and coordination of the movement of construction and personnel vehicles to the site and measures to limit disruption to other motorists, emergency vehicles and school bus timetables;* *d) Scheduling of haulage vehicle movement to minimise convoy length or platoons. Consideration should be given to minimise the route length for road transport of all over size and over mass loads to minimise the impact on traffic;* *e) Details of intersection improvement works in accordance with Austroads Guide to Road Design 2010 and RMS Supplements;* *f) A full and independent risk analysis and inspection of the proposed transport route(s) with procedures for reporting and remediating any damages caused by over size/over mass traffic;* *g) A commitment from the proponent to provide funding for the maintenance and ·repair of any affected classified roads for the duration of transportation of oversize and overmass vehicles and loads, to the satisfaction of RMS.* *The detailed traffic and transport planning for the project is required to involve the appointed transport contractor, Bogan Shire Council and RMS to determine the final details of haulage, including exact transport routes, road-specific mitigation measures and timing. Road and intersection improvement works shall be approved and completed prior to the commencement of construction of the solar plant.'* <u>AGL response</u> As described in Section 8.2 of the EIS, AGL would prepare a Traffic Management Plan and a Haulage Plan for the project and would upgrade the access to the site in accordance with RMS requirements. It is proposed to combine and modify the existing mitigation measures No 51 and 52 to incorporate the above detail, as follows: ***AMENDED Mitigation Measure 52* [51 & 52]. *A Traffic Management Plan and Haulage Plan would be developed for construction traffic prior to commencing construction activities and would be approved by RMS and the Department of Planning & Infrastructure in consultation with Council. The plans shall address, but not necessarily be limited to:*** • ***The origin, number, size, frequency and final destination of vehicles entering/exiting the site.*** • ***Loads, weights and lengths of haulage and construction related vehicles and the number of movements of such vehicles.*** • ***The management and coordination of the movement of construction and personnel vehicles to the site and measures to limit disruption to other motorists, emergency vehicles and school bus timetables.*** • ***Scheduling of haulage vehicle movement to minimise convoy length or platoons. Consideration should be given to minimise the route length for road transport of all oversize and overmass loads to minimise the impact on traffic.*** • ***Details of intersection improvement works in accordance with Austroads Guide to Road Design 2010 and RMS Supplements.*** • ***A full and independent risk analysis and inspection of the proposed transport route(s) with procedures for reporting and***

Issue	Response

	remediating any damages caused by oversize/overmass traffic.
	• ***A commitment from the proponent to provide funding for the maintenance and repair of any affected classified roads for the duration of transportation of oversize and overmass vehicles and loads, to the satisfaction of RMS.***
	• ***Assessment of road condition prior to construction on all local roads that would be utilised.***
	• ***Community consultation regarding traffic impacts where sensitive receiver exceedances are predicted.***
	• ***Consideration of bus schedules (particularly school buses and Countrylink services) and safe interaction between buses and construction traffic, incorporating:***
	  ○ ***Documented vehicle safety procedures regarding the school bus.***
	  ○ ***Driver training requirements.***
	  ○ ***Community consultation regarding impacts to bus routes.***
	• ***Traffic controls (speed limits, signage etc).***
	• ***Procedure to monitor traffic impacts and adapt controls (where required) to reduce the impacts.***
	• ***Provision of a contact phone number to enable any issues or concerns to be rapidly identified and addressed through appropriate procedures.***
	• ***Reinstatement of pre-existing conditions, where required.***
	• ***Assessment of road routes to minimise impacts on transport infrastructure.***
	• ***Scheduling of deliveries of major components to minimise safety risks (on other local traffic including buses)***.

Permits and licences	RMS noted the following permits and licences would be required: • *A formal agreement in the form of a Works Authorisation Deed (WAD) is required between the developer and RMS prior to works commencing;* • *A Road Occupancy Licence is required prior to any works commencing within three metres of the travel lanes in the Barrier Highway. Prior to any such works commencing, a licence will need to be obtained by contacting the Traffic Operations Manager on (02) 6861 1686;* • *Prior to any haulage requiring oversize/overmass vehicles and loads the proponent will be required to obtain special permits. To obtain a permit, the proponent will need to contact RMS Special Permits Unit in Glen Innes on 1300 656 371. The requirements outlined in the RTA publication Operating Conditions: specific permits for oversize and overmass vehicles and loads are to be followed. This publication is available online at: www.rta.nsw.gov.au/heavyvehicles/oversizeovermass* <u>AGL response</u> A new mitigation measure is proposed to reflect that AGL would obtain all required permits and licences from RMS prior to conducting any

Issue	Response
	work in the Barrier Highway road corridor: ***NEW Mitigation Measure 53. AGL would obtain all required permits and licences from RMS prior to conducting any work in the Barrier Highway road corridor, including, as may be required:*** • ***A Works Authorisation Deed (WAD) between the developer and RMS prior to work commencing.*** • ***A Road Occupancy Licence prior to any works commencing on or adjacent to the Barrier Highway.*** • ***Special permits (if necessary) for oversize/overmass vehicles.***
Access point setback from Barrier highway	To provide suitable storage capacity for the largest class of vehicle accessing the proposed lots, any gate, grid or similar structure installed in the access should be setback appropriately (20m for single articulated) from the edge of the road on the Barrier Highway. AGL response A new mitigation measure is proposed regarding access point setback from the Barrier Highway: ***NEW Mitigation Measure 54. AGL would install gates, grids or similar structures at least 20 metres from the edge of the road on the Barrier Highway to provide for suitable storage capacity for the largest class of vehicle accessing the site.***
Potential impacts on Barrier Highway traffic	The submission requests that the proponent shall ensure that dust generated by activities on the subject land, in the adjoining rail reserve and on the access from the Barrier Highway to the subject land does not cause a nuisance or hazard to traffic on the Barrier Highway. Further it requests that reflection of sunlight from the solar panels (glare) shall not cause a nuisance, disturbance or hazard to the travelling public. AGL response **Dust management** The EIS considered the potential for dust generation and resultant impacts, including the potential for dust to cause a nuisance or hazard to traffic on the Barrier Highway. Provision for dust suppression during all project phases is provided in the existing mitigation measure 61 of the EIS. AGL would establish an all-weather access road from the Barrier Highway to the plant site. Water trucks would be used during plant construction to minimise dust generation both on the access road and on the plant site to ensure that dust does not cause a nuisance or hazard to traffic on the Barrier Highway. **Reflection and glare** Solar photovoltaic modules are designed to absorb, not reflect, sunlight. Section 6.6 of the EIS considered the potential for reflection and glare to impact on the travelling public:

Issue	Response
	'The photovoltaic panels would be located more than 1.5 kilometres from the primary view corridor (Barrier Highway), and intervening trees as well as the plant security fence would disrupt the view from the highway. Furthermore, views from the highway are expected to be directed towards the back of the panels rather than the front surface. This arrangement is expected to minimise opportunities for glare and reflectivity for viewers on the Barrier Highway.' As such, given the distance to motorists, the intervening existing and proposed vegetation and orientation of the panels, it is very unlikely glare would cause a nuisance, disturbance or hazard to the travelling public. No changes to the EIS mitigation measures are proposed.
Cost of works	The submission requests that all works be at no cost to the RMS. AGL response AGL would undertake all required traffic planning and upgrade activities at no cost to RMS. No changes to the EIS mitigation measures are proposed.

5.3 CENTRAL WEST CATCHMENT MANAGEMENT AUTHORITY

Issue	Response
Rehabilitation of the site	The CMA considered the commitment and level of detail in the EIS regarding rehabilitation of the site to be insufficient. The CMA strongly recommended a robust and strategic rehabilitation plan be developed in partnership with relevant government agencies. The CMA advised this plan should refer closely to the CMA's Catchment Action Plan 2011 – 2021 (CAP) and strategies aimed at rehabilitating the site should be aligned with management goals and actions within this plan. The CMA noted the EIS refers to the current Central West CMA CAP and advised that the proponent can draw on the information within the CAP to ensure that rehabilitation plans and offset strategies developed for this project are consistent with whole of government natural resource management goals within the Nyngan region. AGL response AGL notes that the proposed project site is currently used for agriculture and has been used for this purpose for many decades. At project decommissioning, AGL would return the site to productive agricultural use.

Issue	Response
	The Nyngan Solar Plant proposal description describes site rehabilitation as a key project element and states that: '*Decommissioning would remove all above ground infrastructure, rehabilitating the site to allow for a return to agricultural or other land use... All areas of soil disturbed during decommissioning would be rehabilitated, appropriate to the existing species composition:* • *In exotic dominated areas, exotic pasture species would be reinstated.* • *In native dominated areas, native species would be reinstated.* *Groundcover vegetation benchmarks would be established as part of pre-construction work to ensure that the site is left in as good or better condition, in terms of vegetation cover, after decommissioning.'* These objectives and general strategy were informed by the input from the CMA, prior to public exhibition of the EIS. Further, the proposal clearly commits to a rehabilitation plan to manage native vegetation impacts as follows. *Mitigation Measure No. 20* [20]*. Areas of native vegetation that were impacted by the proposal would be rehabilitated to a level that demonstrates an increase in the environmental values of the site compared to its pre-operational state. A rehabilitation plan would be prepared that includes ongoing monitoring to ensure the rehabilitation is successful for the long-term.* This commitment is relevant at the decommissioning stage of the project. It is not considered appropriate to develop or outline the rehabilitation plan now given the expected 30 year operating life of the solar plant and the likelihood of relevant agencies, Catchment Action Plans (CAPs) and other key information that would influence the rehabilitation plan changing over that period, as this would make any plan prepared today highly likely to be inappropriate at the time of decommissioning. To address the CMA's concern, the following change is proposed to Mitigation Measure No. 20: ***AMENDED Mitigation Measure No. 20* [20]*. Areas of native vegetation that were impacted by the proposal would be rehabilitated to a level that demonstrates an increase in the environmental values of the site compared to its pre-operational state. A rehabilitation plan would be prepared that includes ongoing monitoring to ensure native vegetation rehabilitation is successful for the long-term. The plan would be developed prior to decommissioning and would be developed in partnership with relevant government agencies.***

5.4 OFFICE OF ENVIRONMENT AND HERITAGE

Issue	Response
Offset Strategy	The submission states that OEH is still concerned regarding the statement in Section G.2.1, "*The proponent would prepare an offset plan before construction but would ensure that the actual areas impacted are 'validated' after construction."* While OEH indicates it understands that the intent of this approach is to ensure that the actual area impacted is offset, OEH maintains the offset strategy should still be developed prior to construction beginning. OEH considers that a detailed Biodiversity Offset Plan, which includes a proposed offset supported by a suitable metric, is required prior to consent. Agency recommendation: That a detailed Biodiversity Offset Plan supported by a suitable metric and addressing the Department's *'Principles for Biodiversity Offsets in the NSW'* is developed, in consultation with OEH, prior to construction beginning. <u>AGL response</u> The proposal clearly commits to an offset plan to be developed prior to construction via the following proposed mitigation measures: *Mitigation Measure No. 21* [21]*. An Offset Plan would be developed with input from OEH and the CMA and according to the strategy provided in Appendix G of the Biodiversity Assessment. It would be finalised prior to any construction impacts, as outlined in the Biodiversity Assessment. The objective of offsetting is to ensure that an overall 'maintain or improve' outcome is met for the project; where impacts cannot be avoided, or sufficiently minimised, the residual impact would be offset in perpetuity.* *Mitigation Measure No. 22* [22]*. Prior to finalising the Offset Site boundaries, the proponent would validate the area impacted by construction to ensure that the actual, not estimated, impacted area is offset.* *Mitigation Measure No. 23* [23]*. The offset site management actions and their outcomes would be reported every two years to the Department of Planning and Infrastructure for the duration of the project (up to 30 years) to demonstrate that a 'maintain or improve' outcome has been met.* Recognising that an outline of the plan has been provided with the EIS to demonstrate the feasibility of these commitments, the detailed development of this plan prior to consent is not considered appropriate as AGL do not wish to invest in the preparation of detailed environmental management plans until such time as the project approval has been determined. No change is proposed to these commitments as they already include a role for OEH to ensure that detailed questions regarding methodology and implementation of the plan would reflect agency views and that the plan would be developed and finalised prior to construction beginning.

Issue	Response
Potential closure of dam and creation of alternative watering point	OEH considers that while farm dams provide a water resource for some species, they can also lead to declines of fauna and flora species sensitive to grazing due to an increase in total grazing pressure of domestic stock, feral herbivores and macropods. They can also increase habitat and preferred foraging sites for feral carnivores such as cats and foxes. Agency recommendation: That, if the dam in the south of the solar plant site is removed, an alternative watering point is not established. AGL response It is proposed to amend existing mitigation measure No. 15 to address OEH's concerns that a new watering point is being created solely for the purpose of habitat creation. It is noted that the existing dam located along the southern portion of the proposed solar plant site supports agricultural activities on surrounding properties. If the dam is removed as part of solar plant construction, a new dam may be required separately to the proposal on adjoining land to support ongoing agricultural activities on these properties. ***AMENDED Mitigation Measure No. 15* [15]. *If the dam in the south of the solar plant site is removed during the works, an alternative watering point would not be established on the proposal site.***

5.5 BOGAN SHIRE COUNCIL

Issue	Response
Council support contingent upon prior agreement with the proponent on key issues	It is noted that the Council are generally supportive of the proposal but have identified the following two issues as requiring prior agreement with the proponent: a) *That the facility access road turnoff from the Barrier Highway is upgraded to accommodate the type and frequency of construction traffic generated by the Proposal.* b) *That more workforce modelling studies are undertaken to ascertain the source of labour and the subsequent impacts on short term accommodation supply and the provision of Council services.* AGL response The proponent recognises these issues as legitimate concerns and seeks to maintain a positive and productive relationship with Council. With respect to the facility access road, the intersection with the Barrier Highway would be upgraded to the requirements of RMS as the responsible roads authority, as discussed in Section 5.2 and amended Mitigation Measure No 52. With respect to the details of workforce sourcing, size, timing and logistics, this information would be determined at a future date, pending project approval, in consultation with the EPC (Engineer Procure Construct) contractor for the project. Additional details are provided in this table below. No changes to the EIS mitigation measures are proposed.
Land tenure	Council have requested more details regarding the current agreement with the landholder. For instance, is there an existing legal agreement to allow the land purchase and to access the property? AGL response AGL has an existing legal agreement with the current landowner to allow for land purchase and access to the project site. The details of this agreement are confidential.
Roads and Traffic - general	Council seeks greater clarity regarding the mode of transport for construction workers to the site, including evidence that 80% uptake of shuttle bus patronage is fair and reasonable. Based on parking facilities proposed, Council considers construction related traffic to be significant and Council seeks the road infrastructure to be of a standard that complies with *Austroads Guide for Road Design* and *Austroads Guide to Bridge Technology*, with plans subject to prior approval from the RMS and Council. AGL response

Issue	Response
	First Solar, AGL's construction contractor for the project, would establish a policy to discourage the use of personal vehicles for labour commuting to the site. The exception would be those vehicles used by contractors which are required to carry tools and equipment or which are directly used to perform the works. Wherever possible such vehicles would remain on site for the duration and persons would be transported to and from the site by shuttle bus with parking for private vehicles being made available near the accommodation facilities. All access to the project site including parking areas would be controlled by security personnel. Only select Managers and Supervisors would be granted access and parking passes within the site. Locally based workers who desire to travel to site by private vehicle must demonstrate the need to use private transport and obtain a parking permit in advance. All workers in personal vehicles that do not have a parking pass would be turned away. First Solar estimates that approximately 90% of workers would be transported to and from the site by shuttle bus. This would involve approximately 20 shuttle buses per day based on a 20-person capacity shuttle (or approximately 40 vehicle trips per day). First Solar further estimates that approximately 20-30 personal vehicles per day (40-60 vehicle trips per day) would be required during peak construction. All road infrastructure would be upgraded to the requirements of RMS as the responsible roads authority. No changes to the EIS mitigation measures are proposed.
Access road intersection	Council advised that in its view the intersection of the facility access road and the Barrier Highway, managed by the RMS, should be upgraded to appropriate Austroad design standards that would accommodate the peak construction traffic, including 30 heavy vehicles per day and at least 80 cars and say 20 buses. Such upgrading should include wide bitumen sealed shoulders for 50 m and acceleration and deceleration lanes. AGL response As stated above, road infrastructure, including the access road intersection with the Barrier Highway, would be upgraded to RMS requirements as the responsible roads authority, in accordance with the amendments to Mitigation Measure No. 52 (refer Section 5.2).
Access road surface	Council recommended that the access road be constructed with a minimum 150mm thick crushed rock pavement and bitumen sealed for a sufficient distance from the Barrier Highway to prevent mud, gravel, and dirt being dropped onto the highway. AGL response AGL would construct the site access road to the appropriate standard for a 25 year design life. The road shall be constructed with an appropriate capping layer to prevent mud, gravel and dirt from being dropped onto the highway. As stated above, road infrastructure, including the access road intersection with the Barrier Highway, would be upgraded to RMS requirements as the responsible roads authority, in accordance with amended Mitigation Measure No. 52 (refer Section 5.2).

Issue	Response
Construction traffic, school buses and other buses	Council recommended that the proponent provide to Council: *a) Documented vehicle safety procedures regarding the school bus;* *b) Documentary evidence every three months of driver training regarding the school bus; and* *c) The results of three monthly independent compliance reports to verify that the vehicle transport procedures regarding the school bus are adequate and are being complied with.* Council advised it reserves the right to impose more stringent safety standards if the audit results show unsatisfactory levels of compliance. Council also noted that daily Countrylink bus services from Dubbo to Broken Hill and return also pass the access point to the solar plant. Evidence of bus traffic should reinforce the need for a comprehensive upgrade of the intersection including deceleration and acceleration lanes. AGL response The proponent is committed to ensuring the safe interaction of school and other buses with construction traffic. The existing Mitigation Measure No. 51 stipulates that a Traffic Management Plan would be developed for construction traffic with input from the road authority and would include *"consideration of bus schedules – i.e., Countrylink and school."* As outlined previously in Section 5.2 in response to the submission from RMS, it is proposed to combine and amend the existing Mitigation Measures No. 51 and 52. The amendment provided in Section 5.2 includes the following item in response to Council's concerns regarding construction traffic, school and other buses: ***AMENDED Mitigation Measure No. 52* [51 &52]*:*** ***... consideration of bus schedules (particularly school buses and Countrylink services) and safe interaction between buses and construction traffic, incorporating:*** ***a) Documented vehicle safety procedures regarding the school bus*** ***b) Driver training requirements.*** ***c) Community consultation regarding impacts to bus routes.***
Waste management	Council advised that in order for Council to analyse the potential implications on its waste management facilities, Council required detailed waste generation data (i.e. predicted volumes of waste in the construction phase, and identification of which waste disposal facilities or resource recovery centres owned and operated by Council would be used). AGL response

Issue	Response
	Waste generation would be minimal. The majority of the waste material produced would have recycling value. Items such as scrap metal, wire, pallets, cable spools and cardboard would be sent to recycling companies and not to the landfill. Items such as plastic wrapping, lunch waste and general office waste are items that would be disposed of in a landfill facility. Further information would be provided in the Waste Management Plan for the project which would be prepared as part of Mitigation Measure No. 55 [53]. No changes to the EIS mitigation measures are proposed.
Short term accommodation supply and demand	Council requested further information regarding potential socioeconomic impacts of the project. The Council questions and AGL's responses are provided below. *a) What percentage of the construction workforce will be sourced from the local area? Full details should be provided on the information used to determine the percentage.* The exact percentage of the construction workforce sourced from the local area is not known at this time. First Solar intends to utilise as much local labour as is feasible to perform the works. Feedback from local subcontractors, council members and accommodation providers has suggested that a meaningful percentage of the construction workforce may need to be sourced from outside Nyngan itself, with additional support expected from both outside the Nyngan-Dubbo-Cobar region. *b) Is there enough short term accommodation in Nyngan to accommodate the construction workers, given the current demands from the Tritton Copper Mine? Full details should be provided on the information used to determine the matter. If there are insufficient beds, how does the proponent propose to address the accommodation demands?* AGL recognises that there is not enough short term accommodation in Nyngan to house the proposed labour force, given the current demands from the Tritton Copper Mine. A number of options are currently being reviewed to address this issue. First Solar, as the EPC Contractor for the proposal, proposes to construct a suitable work camp to accommodate up to 400 workers, complete with reasonable recreation area, sleeping quarters and catering facility within the levee bank area of Nyngan township. Approval for the construction of the work camp accommodation and associated facilities will be sought from Council. *c) What will be the impact generated by the additional workers on Council-related services and facilities?* AGL expects that there would be minimal impact on Council services as the work camp facility would be designed and operated so as to be largely self-sufficient. *d) What is the cumulative impact on workforce supply and demand given the existing Tritton Copper Mine and the proposed Scandium Project, with anecdotal evidence suggesting that the existing workforce is at or near full employment?* If the project is approved, AGL and First Solar would conduct a labour survey to address the cumulative impact on workforce supply and demand given the existing Tritton Copper Mine and the proposed Scandium project. It is considered that the mine projects would likely take priority in terms of labour supply and demand.

Issue	Response
	e) What actions will the proponent take to employ local tradespeople and other workers in preference to drive-in, drive out or fly-in, fly-out workers? First Solar is currently engaging in discussions with local contractors and labour hire organisations in an effort to understand how much of the project labour force can be sourced locally. In May 2013, First Solar hosted separate subcontractor forums in Dubbo, Nyngan and Cobar, each of which were strongly attended by potential local the local subcontractors, trades people and workers who are interested in working on the project. *f) What is the proponent's intention regarding building a temporary camp to house construction workers?* First Solar is planning to construct a temporary work camp to accommodate up to 400 workers, complete with reasonable recreation area, sleeping quarters and catering facility. First Solar is currently considering two potential sites for the temporary work camp. The first is a Council-owned parcel of land adjacent to the Nyngan showgrounds and the second is an area next to the old Nyngan hospital facility. AGL and First Solar would continue to work with Council regarding the location of the temporary camp to ensure it is acceptable to Council and in the best interests of the local community. Upon completion of the project, the work camp would be remediated and the land returned to its current condition. Approval and construction of this facility would be coordinated with the Bogan Shire Council. No changes to the EIS mitigation measures are proposed.
Workforce training program	Council advised it believes that the proponent should commit to providing a minimum of five apprenticeships or traineeships to local personnel during the construction phase with consideration given to some form of ongoing employment with the proponent. <u>AGL response</u> First Solar would undertake to establish up to five apprenticeships or traineeships, either with First Solar itself or with specialised subcontractors where First Solar is not performing work directly. Ongoing employment may be considered on a case by case basis. No changes to the EIS mitigation measures are proposed.
Water resources	Council advise that if water is required from Bogan Shire Council sources then it could be provided at appropriate commercial rates. <u>AGL response</u> Noted.
Access / viewing point for tourists	Council advised that once the facility is operational, it would encourage allowing public access to the site, because a solar farm would be a tourist attraction. Council suggested that a viewing area be established to the north side of the panels and outside the panel security fence. Council suggested that such a service would be a beneficial public relations exercise for AGL and that an information board would also help

Issue	Response
	generate a positive tourist experience. AGL response Promotion of the solar plant site (through construction of a viewing platform and information boards or other means) is not currently part of the proposal. In respect of a viewing platform, AGL is happy to discuss construction of a public viewing area if Council wants to build an access road to a suitable location. However, AGL notes that construction of a public viewing area along the north side of the solar plant would require establishment of road approximately 4 kilometres long from the Barrier Highway. Whilst a gazetted public roadway does exist to the west of the project site, construction of a sealed road in this area would require substantial tree clearing, which could have adverse local flora and fauna impacts and affect the visual and noise buffering capacity of the existing treed corridor. AGL additionally notes that a public viewing area would likely need to be an elevated platform, which would present a potential insurance liability issue for Council. No changes to the EIS mitigation measures are proposed.
Transparency	Council seeks close co-operation and dialogue with DoPI as it deliberates on the solar plant proposal. To this end, Council requested: a) A meeting with the Department to discuss this Submission during its evaluation of the EIS and other submissions; b) An opportunity to comment on the proponent's response to all submissions; and c) Receiving a copy of any draft consent conditions at the same time that they might be forwarded to the proponent for comment. AGL response AGL strongly supports the Bogan Shire Council working with DoPI to deliver a timely outcome. While these are primarily matters for DoPI to address, in the interests of continuing a positive and productive relationship with Council, the proponent has submitted a draft copy of this Submissions Report containing the proposed amended mitigation measures to Council for information/comment prior to submission to DoPI. No changes to the EIS mitigation measures are proposed.

5.6 DEPARTMENT OF PRIMARY INDUSTRIES – CATCHMENT AND LANDS DIVISION

Issue	Response
Transmission line easement (part Lot 7300 DP1156652)	Crown Lands (part of DPI's – Catchment and Lands Division) advised that Essential Energy have lodged an application to acquire an easement over part Lot 7300 DP1156652 and that this is currently being processed but is not yet finalised. Agency recommendation: An easement over the affected part of Lot 7300 DP1156652, with compensation payable to the Crown under the provisions of the *Land Acquisition (Just Terms Compensation) Act 1991*, is created prior to commencement of energy generation at the site. AGL response A new mitigation measure is proposed to address the above recommendation: ***NEW Mitigation Measure 48. An easement over the affected part of Lot 7300 DP1156652, with compensation payable to the Crown under the provisions of the Land Acquisition (Just Terms Compensation) Act 1991, would be created prior to commencement of energy generation at the site.***

5.7 DEPARTMENT OF PRIMARY INDUSTRIES – OFFICE OF WATER

Issue	Response
Water supply	The NSW Office of Water (NOW) advises that the proponent should ensure that all water needs both during construction and for on-going operation are secured prior to the commencement of activities, and ensure that sufficient water will be available in times of low water availability. AGL response Section 7.9 of the EIS identified that most of the proposal's water use needs would be required during the construction phase. Operational water use requirements would likely be met from on-site harvesting of rainwater and/or bottled water. AGL is negotiating commercial arrangements to secure water supply with the Cobar Water Board. Bogan Shire Council has also noted in their submissions (refer Section 5.5) that if water is required from Bogan Shire Council sources then it could be provided at appropriate commercial rates. It is proposed to amend existing Mitigation Measure No. 60 to address NOW's suggestion that water supply be secured prior to commencement of activities. ***AMENDED Mitigation Measure No. 62 [60]. If water is required from the local water supply authorities, access would be obtained prior to commencement of activities in consultation with:*** • ***Cobar Water Board, for water from the Cobar Water pipeline.*** • ***Bogan Shire Council, for water from the local council supply.***

5.8 DEPARTMENT OF PRIMARY INDUSTRIES – FISHERIES, FORESTRY AND AGRICULTURE DIVISIONS

Issue	Response
No concerns	The Fisheries, Forestry and Agriculture Divisions of DPI did not have any matters to raise in respect to the Environmental Impact Statement. AGL response No changes to the EIS mitigation measures are proposed.

6 MODIFICATIONS TO THE PROPOSAL

As a result of the submissions, a number of changes have been made to the proposal and its associated environmental management commitments.

6.1 PROPOSAL CHANGES

No major changes to the infrastructure layout are proposed. Minor changes to the proposal description are outlined in Section 2.1.1.

6.2 ENVIRONMENTAL MANAGEMENT CHANGES

6.2.1 Deleted mitigation measures

No mitigation measures presented in the EIS have been deleted, although it is noted that existing mitigation measures 51 and 52 have been combined.

6.2.2 Modified mitigation measures

The following mitigation measures have been revised based on the submissions presented in Section 5 of this Submissions Report:

Table 6-1 Modified mitigation measures

New No.	Old No.[4]	Amended measure
15	15	*If the dam in the south of the solar plant site is removed during the works, an alternative watering point would not be established on the proposal site.*
20	20	*Areas of native vegetation that were impacted by the proposal would be rehabilitated to a level that demonstrates an increase in the environmental values of the site compared to its pre-operational state. A rehabilitation plan would be prepared that includes ongoing monitoring to ensure native vegetation rehabilitation is successful for the long-term. The plan would be developed prior to decommissioning and would be developed in partnership with relevant government agencies.*
52	51 (& 52)	*A Traffic Management Plan and Haulage Plan would be developed for construction traffic prior to commencing construction activities and would be approved by RMS and the Department of Planning & Infrastructure in consultation with Council. The plans shall address, but not necessarily be limited to:* • *The origin, number, size, frequency and final destination of vehicles entering/exiting the site.* • *Loads, weights and lengths of haulage and construction related vehicles and the number of movements of such vehicles.* • *The management and coordination of the movement of construction and personnel vehicles to the site and measures to limit disruption to other motorists, emergency vehicles and school bus timetables.* • *Scheduling of haulage vehicle movement to minimise convoy length or platoons. Consideration should be given to minimise the route length for*

[4] Mitigation measure numbering as presented in the EIS.

New No.	Old No.[4]	Amended measure

		road transport of all over size and over mass loads to minimise the impact on traffic.
		• *Details of intersection improvement works in accordance with Austroads Guide to Road Design 2010 and RMS Supplements.*
		• *A full and independent risk analysis and inspection of the proposed transport route(s) with procedures for reporting and remediating any damages caused by over size/over mass traffic.*
		• *A commitment from the proponent to provide funding for the maintenance and repair of any affected classified roads for the duration of transportation of oversize and overmass vehicles and loads, to the satisfaction of RMS.*
		• *Assessment of road condition prior to construction on all local roads that would be utilised.*
		• *Community consultation regarding traffic impacts where sensitive receiver exceedances are predicted.*
		• *Consideration of bus schedules (particularly school buses and Countrylink services) and safe interaction between buses and construction traffic, incorporating:*
		  ○ *Documented vehicle safety procedures regarding the school bus.*
		  ○ *Driver training requirements.*
		  ○ *Community consultation regarding impacts to bus routes.*
		• *Traffic controls (speed limits, signage etc).*
		• *Procedure to monitor traffic impacts and adapt controls (where required) to reduce the impacts.*
		• *Provision of a contact phone number to enable any issues or concerns to be rapidly identified and addressed through appropriate procedures.*
		• *Reinstatement of pre-existing conditions, where required.*
		• *Assessment of road routes to minimise impacts on transport infrastructure.*
		• *Scheduling of deliveries of major components to minimise safety risks (on other local traffic including buses).*

62	60	*If water is required from the local water supply authorities, access would be obtained prior to commencement of activities in consultation with:* • *Cobar Water Board, for water from the Cobar Water pipeline.* • *Bogan Shire Council, for water from the local council supply.*

6.2.3 New mitigation measures

The following mitigation measures have now been added to the proposal and are supplementary to those presented in the EIS:

Table 6-2 New mitigation measures

New No.	Mitigation Measures
48	*An easement over the affected part of Lot 7300 DP1156652, with compensation payable to the Crown under the provisions of the Land Acquisition (Just Terms Compensation) Act 1991, would be created prior to commencement of energy generation at the site.*
53	*AGL would obtain all required permits and licences from RMS prior to conducting any work in the Barrier Highway road corridor, including, as may be required:* • *A Works Authorisation Deed (WAD) between the developer and RMS prior to work commencing.* • *A Road Occupancy Licence prior to any works commencing on or adjacent to the Barrier Highway.* • *Special permits (if necessary) for oversize/overmass vehicles.*
54	*AGL would install gates, grids or similar structures at least 20 metres from the edge of the road on the Barrier Highway to provide for suitable storage capacity for the largest class of vehicle accessing the site.*

6.3 COMPLETE REVISED MITIGATION MEASURES

The table in Appendix A documents the revised environmental management commitments of the proposal. Where measures are relevant to more than one environmental aspect, they are cited only once under the most relevant aspect, to avoid duplication. The applicable project phase (construction, operation or decommissioning) is also noted.

7 CONCLUSION

This Submissions Report responds to the comments and issues raised in submissions from the community and Government agencies, following public exhibition of the Nyngan Solar Plant EIS. The Submissions Report fulfils the requirements of Section 75H of the *Environmental Planning and Assessment Act 1979*.

In response to the submissions:

- 0 mitigation measures have been deleted
- 4 mitigation measures have been modified
- 3 new mitigation measures has been created

Several issues raised, relating to waste quantities, work force travel, and accommodation and training,, require information that would not be available until the detailed planning phase of the project, pending project approval and dependant on the successful contract tenderers. These issues are recognised as legitimate concerns and would be documented in the Construction Environmental Management Plan (CEMP), to be prepared in consultation with relevant agencies (including the local Council) and submitted to DoPI for approval, prior to construction commencement. New mitigation measures and modifications to several mitigation measures have been made to ensure that the concerns raised would be captured by the controls in these plans.

In consideration of the assessment of the impacts from the project contained in the EIS, and the proposed mitigation measures committed to in the revised mitigation measures (included in Appendix A of this report), it is believed that all relevant issues and concerns have been addressed and that the project should now proceed for approval by the Minister.

APPENDIX A REVISED MITIGATION MEASURES

The following table constitutes the revised mitigation measures to which the proponent commits, pending project approval, to manage the environmental impacts of the project. **Bold entries are new or modified mitigation measures.** Mitigation measure numbering has been revised.

Construction (C), Operation, (O), Decommissioning (D)

Table A-1 Revised mitigation measures.

NEW No.	OLD No.	Mitigation measure	Solar plant			Transmission line		
		Biodiversity	**C**	**O**	**D**	**C**	**O**	**D**
1.	1.	A supplementary survey during spring (early October) prior to the finalisation of the transmission line design would be conducted to confirm if threatened flora species including the Red-darling Pea and Pine Donkey Orchid inhabit the higher quality woodland vegetation south of the Barrier Highway. If these species are identified in areas proposed for impact, transmission infrastructure would be microsited with input from an ecologist to ensure a significant impact is avoided. If unavoidable, all areas of suitable habitat within the easement would be included as additional permanent impact areas and would be added to the total area required to be offset.				**X**		
2.	2.	Grey-crowned Babbler nest sites identified in Figure 4-7 of the Biodiversity Assessment would be protected from impact during infrastructure siting and design process.				**X**		
3.	3.	Pre-clearance surveys would be conducted prior to felling hollow-bearing trees.	**X**			**X**		
4.	4.	Works would avoid impacts to mature trees that are to be retained. Tree protection standards would comply with Australian standard AS 4970-2009 *Protection of trees on development sites* (Standards Australia, 2009). Wherever practicable, excavations and vehicle/machinery movements would occur outside the canopy dripline of large eucalypts.	**X**			**X**		
5.	5.	Removal of the east-west strip of vegetation must be conducted outside of the breeding season of the Grey-crowned Babbler (June to February) unless the nests have been confirmed to be inactive.	**X**			**X**		
6.	6.	Restoration of habitat: Hollows from felled hollow-bearing trees would be salvaged and placed in retained trees or on poles in adjacent habitat. For each hollow salvaged, a nest box would also be installed to offset the loss of habitat. Where it is not deemed to be a fire hazard, timber from cleared trees (coarse woody debris – CWD – including logs) is to be relocated into areas of adjacent woodland to provide foraging habitat for species such as Grey-crowned Babblers and other ground dwelling fauna. CWD would be scattered evenly across the relocation areas, not piled or windrowed.	**X**			**X**		

NEW No.	OLD No.	Mitigation measure	Solar plant			Transmission line		
		Cleared native vegetation not likely to provide habitat would be mulched rather than burned.						
7.	7.	Within areas of native vegetation, existing tracks would be used wherever possible to avoid compaction and/or disturbance.	X			X		
8.	8.	Traffic management measures would be incorporated into the construction and operation phase and would address traffic flow, vehicle speed and vehicle numbers entering and leaving the site. This would aim to prevent collisions with fauna utilising the site, particularly Grey-crowned Babblers.	X			X		
9.	9.	Excavated topsoil would be stored separately from subsoil and replaced in a manner that replicates the original profile as closely as possible to assist rapid revegetation.	X			X		
10.	10.	Site stabilisation, rehabilitation and revegetation would be undertaken progressively during works, to ensure that soils are stabilised as soon as practical. This would minimise weed infestation, sedimentation and erosion, which degrade habitat.	X			X		
11.	11.	Disturbed areas would be identified and used preferentially for vehicle and machinery access, materials laydown, stockpiling of cleared vegetation and the deposition and retrieval of spoil whenever practicable, to minimise the footprint of the development on intact native-dominated areas.	X			X		
12.	12.	A weed management plan would be developed for the site, guided by the measures set out in the Biodiversity Assessment.	X			X		
13.	13.	Perimeter security fencing will feature heavy duty fabric to increase visibility to fast flying parrots.	X					
14.	14.	Where trenches are to be excavated and backfilled in well vegetated native areas, whole sods would be removed, stored in moist, shaded conditions and replaced following the works. Sod storage time would be minimised and sods would be replaced in a manner that maximises the chances of re-establishment and soil stabilisation.	X					
15.	**15.**	**If the dam in the south of the solar plant site is removed during the works, an alternative watering point would not be established on the proposal site.**	X					
16.	16.	Trenches would be left open for the least time practical and would be inspected for trapped fauna prior to back filling. Any trench sections left open overnight would be inspected early in the morning and any trapped fauna removed.	X					
17.	17.	A groundcover management plan would be developed, as outlined in the Biodiversity Assessment.	X	X				
18.	18.	The space between the PV array rows would be kept clear to enable access by vehicles for ongoing weed control, and pasture renovation, if required.		X				
19.	19.	Nest boxes and salvaged hollows remounted during the construction phase would be routinely inspected to check the integrity of the structures and remedy them if required.		X			X	

NEW No.	OLD No.	Mitigation measure	Solar plant			Transmission line		
20.	**20.**	**Areas of native vegetation that were impacted by the proposal would be rehabilitated to a level that demonstrates an increase in the environmental values of the site compared to its pre-operational state. A rehabilitation plan would be prepared that includes ongoing monitoring to ensure native vegetation rehabilitation is successful for the long-term. The plan would be developed prior to decommissioning and would be developed in partnership with relevant government agencies.**			X			
21.	21.	An Offset Plan would be developed with input from OEH and the CMA and according to the strategy provided in Appendix G of the Biodiversity Assessment. It would be finalised prior to any construction impacts, as outlined in the Biodiversity Assessment. The objective of offsetting is to ensure that an overall 'maintain or improve' outcome is met for the project; where impacts cannot be avoided, or sufficiently minimised, the residual impact would be offset in perpetuity.	X			X		
22.	22.	Prior to finalising the Offset Site boundaries, the proponent would validate the area impacted by construction to ensure that the actual, not estimated, impacted area is offset.	X			X		
23.	23.	The offset site management actions and their outcomes would be reported every two years to the Department of Planning and Infrastructure for the duration of the project (up to 30 years) to demonstrate that a 'maintain or improve' outcome has been met.		X			X	
		Aboriginal heritage						
24.	24.	If human skeletal remains are found during the activity, work in the area of the remains would stop immediately, the area would be secured to prevent unauthorised access and the NSW Police and OEH would be contacted.	X		X	X		X
		Hydrology (surface and groundwater)						
25.	25.	The substation and office building would be designed to accommodate a 1:100 year flood and be located in the south-west of the site, outside the inundation zone (Figure 6-1 of the EIS).	X					
		Noise amenity						
26.	26.	The employee and contractor induction would inform all site personnel about noise management measures, construction hours and nearest sensitive receivers.	X			X		
27.	27.	All employees are responsible for managing noise from their work activities and working in a manner to reduce noise.	X		X	X		X
28.	28.	Works are to be carried out during standard work hours (i.e., 7am to 6pm Monday to Friday; 8am to 1pm Saturdays). Any construction outside of these normal working hours would only be undertaken with prior approval from relevant authorities. For works outside standard hours, inform affected residents and other sensitive land use occupants between 5 and 14 days before commencement.	X		X	X		X
29.	29.	Where reasonable and feasible, noisy activity would be carried out in the least sensitive time periods (to be	X		X	X		X

NEW No.	OLD No.	Mitigation measure	Solar plant			Transmission line		
		determined through community consultation).						
30.	30.	A Construction Noise Management Plan would be prepared as part of the Construction Environmental Management Plan. It would include provision for noise monitoring to be undertaken in the event a noise complaint is received to verify if target noise levels are exceeded at that receiver. If so, additional measures would be developed in consultation with the complainant.	X			X		
31.	31.	Community consultation would be ongoing for residences within close proximity to the works. The information would include details of: • The proposed works. • The duration and nature of the works during construction. • What works are expected to be noisy. • What is being done to minimise noise. • When respite periods would occur. • Regular updates on progress of works.	X			X		
32.	32.	Ensure equipment is operated and maintained in accordance with the manufacturer's instructions including replacement of engine covers, repair of defective silencing equipment, tightening of rattling components, repair of leakages in compressed air lines and shutting down equipment not in use.	X	X	X	X	X	X
33.	33.	Avoid the operation of noisy equipment near noise-sensitive areas and where possible, loading and unloading would be conducted away from sensitive areas.	X	X	X	X	X	X
34.	34.	Position plant and equipment on site in a position that provides the most acoustic shielding from buildings and topography. Plant known to emit noise in one direction would be orientated where practicable to screen the emissions.	X	X	X	X	X	X
35.	35.	Where feasible and reasonable install multi-frequency alarms and smart alarms on vehicles, taking into account the requirements of the Work Health and Safety legislation.	X		X	X		X
36.	36.	Keep truck drivers informed of designated vehicle routes, parking locations, acceptable delivery hours or other relevant practices (for example, minimising the use of engine brakes, and no extended periods of engine idling).	X	X	X	X	X	X
		Visual amenity						
37.	37.	To break up views of infrastructure, screening vegetation would be planted or allowed to regenerate in areas identified in Figure 6.1 of the Visual Impact Assessment. Maintenance requirements of the planting would be considered within the operational management plan to ensure that plants are watered as required and that dead plants are replaced.	X	X		X	X	
38.	38.	Clearing of vegetation minimised. In particular, the tree lines on the western, northern and eastern boundaries of the site retained intact and the transmission line route placed to allow this to occur.	X			X		

NEW No.	OLD No.	Mitigation measure	Solar plant			Transmission line		
39.	39.	All areas disturbed by the construction of the proposed transmission line and solar plant would be allowed to naturally regenerate and be monitored to ensure that regeneration has occurred. Where natural regeneration is unsuccessful, revegetation would be undertaken.	X			X		
40.	40.	The colour of above ground structures, including the construction site offices, would be sympathetic to the landscape character of the site to minimise visual contrast.	X					
41.	41.	The following principles would be considered regarding placement of poles near the Barrier Highway crossing to reduce their visual impact: • setting poles as far back as possible from the road where the transmission line crosses the road • arranging the poles so that the transmission line crosses roads at right angles • locating poles where they can be screened from view by existing vegetation (and adding in screening vegetation where needed).				X		
		Air quality						
42.	42.	Air quality impacts would be addressed via the development of: • Protocols to guide vehicle and construction equipment use, to minimise emissions. • Protocols to minimise and treat dust (water carts or similar).	X		X	X		X
		Health and safety						
43.	43.	The substation and transmission lines would be located as far as practical from residences, farm sheds, and yards in order to reduce the potential for both chronic and acute exposure to EMFs.	X			X		
44.	44.	Design of electrical infrastructure would minimise EMFs.	X			X		
45.	45.	Fencing around the substation would be maintained to limit public access.		X				
		Land use impacts and mineral resources						
46.	46.	Consultation with neighbouring landholders regarding any temporary impacts to access or risks to livestock. Additional specific mitigation may be required such as: • Additional fencing to protect livestock from collision risks • Vehicle speed restrictions on access roads.	X			X		
47.	47.	Consultation with mineral stakeholders would be undertaken to inform them of the timing of works and final infrastructure layout.	X			X		
48.	-	**An easement over the affected part of Lot 7300 DP1156652, with compensation payable to the Crown under the provisions of the Land Acquisition (Just Terms Compensation) Act 1991, would be created prior to commencement of energy generation at the site.**				X		

NEW No.	OLD No.	Mitigation measure	Solar plant			Transmission line		
		Socioeconomic and community wellbeing						
49.	48.	A Community Consultation Plan would be developed to manage impacts to community stakeholders, including but not limited to: • Protocols to keep the community updated about the progress of the project and project benefits. • Protocols to inform relevant stakeholders of potential impacts (haulage, noise etc). • Protocols to respond to any complaints received.	X	X	X	X	X	X
50.	49.	Liaise with local industry representatives to maximise the use of local contractors, manufacturing facilities, materials.	X			X		
51.	50.	Liaise with local representatives regarding accommodation options for staff, to minimise adverse impacts on local services.	X			X		
		Traffic, transport and road safety						
52.	**51. & 52**	**A Traffic Management Plan and Haulage Plan would be developed for construction traffic prior to commencing construction activities and would be approved by RMS and the Department of Planning & Infrastructure in consultation with Council. The plans shall address, but not necessarily be limited to:** • **The origin, number, size, frequency and final destination of vehicles entering/exiting the site.** • **Loads, weights and lengths of haulage and construction related vehicles and the number of movements of such vehicles.** • **The management and coordination of the movement of construction and personnel vehicles to the site and measures to limit disruption to other motorists, emergency vehicles and school bus timetables.** • **Scheduling of haulage vehicle movement to minimise convoy length or platoons. Consideration should be given to minimise the route length for road transport of all over size and over mass loads to minimise the impact on traffic.** • **Details of intersection improvement works in accordance with Austroads *Guide to Road Design 2010* and RMS Supplements.** • **A full and independent risk analysis and inspection of the proposed transport route(s) with procedures for reporting and remediating any damages caused by oversize/overmass traffic.** • **A commitment from the proponent to provide funding for the maintenance and repair of any affected classified roads for the duration of transportation of oversize and overmass vehicles and loads, to the satisfaction of RMS.** • **Assessment of road condition prior to construction on all local roads that would be utilised.** • **Community consultation regarding traffic impacts where sensitive receiver exceedances are predicted.** • **Consideration of bus schedules (particularly school buses and Countrylink services) and safe interaction**	X		X	X		X

NEW No.	OLD No.	Mitigation measure	Solar plant			Transmission line		
		between buses and construction traffic, incorporating: ○ **Documented vehicle safety procedures regarding the school bus.** ○ **Driver training requirements.** ○ **Community consultation regarding impacts to bus routes.** • **Traffic controls (speed limits, signage etc).** • **Procedure to monitor traffic impacts and adapt controls (where required) to reduce the impacts.** • **Provision of a contact phone number to enable any issues or concerns to be rapidly identified and addressed through appropriate procedures.** • **Reinstatement of pre-existing conditions, where required.** • **Assessment of road routes to minimise impacts on transport infrastructure.** • **Scheduling of deliveries of major components to minimise safety risks (on other local traffic including buses).**						
53.	-	**AGL would obtain all required permits and licences from RMS prior to conducting any work in the Barrier Highway road corridor, including, as may be required:** • **A Works Authorisation Deed (WAD) between the developer and RMS prior to work commencing.** • **A Road Occupancy Licence prior to any works commencing on or adjacent to the Barrier Highway.** • **Special permits (if necessary) for oversize/overmass vehicles.**						
54.	-	**AGL would install gates, grids or similar structures at least 20 metres from the edge of the road on the Barrier Highway to provide for suitable storage capacity for the largest class of vehicle accessing the site.**						
		Resource use and waste management						
55.	53.	A Waste Management Plan (WMP) would be developed to minimise wastes. It would include but not be limited to: • Identification of opportunities to avoid, reuse and recycle, in accordance with the waste hierarchy • Quantification and classification of all waste streams • Provision for recycling onsite • Provision of toilet facilities for onsite workers and how sullage would be disposed of (i.e., pump out to local sewage treatment plant) • Provision of disposal at facilities permitted to accept the waste.	**X**			**X**		
56.	54.	Excess subsoil would be removed from the site and disposed of at an appropriate fill storage site.	**X**		**X**	**X**		**X**
57.	55.	Excess topsoil would be retained and used in site rehabilitation.	**X**		**X**	**X**		**X**

NEW No.	OLD No.	Mitigation measure	Solar plant			Transmission line		
		Fire and bush fire						

58.	56.	Develop a Bush Fire Management Plan with input from the RFS to include but not be limited to:
		• Management of activities with a risk of fire ignition.
		• Management of fuel loads onsite.
		• Storage and maintenance of fire fighting equipment, including siting and provision of adequate water supplies for bush fire suppression.
		• The below requirements of *Planning for Bush Fire Protection 2006* -
		  ○ Identifying asset protection zones.
		  ○ Providing adequate egress/access to the site (s4.1.3).
		  ○ Emergency evacuation measures (s4.2.7).
		• Operational procedures relating to mitigation and suppression of bush fire relevant to the solar plant.
		• Post-fire clean up procedures, including the need for sampling for emissions of cadmium and lead, where appropriate.
			X	X		X	X	

		Historic heritage						
59.	57.	Should an item of historic heritage be identified, the Heritage Branch (Office of Environment and Heritage) would be contacted prior to further works being carried out in the vicinity.	X			X		
		Soil and water (includes water use)						
60.	58.	Site specific Erosion and Sediment Control Plans would be prepared, implemented and monitored during the project, in accordance with Landcom (2004), to minimise soil and water impacts. These plans would include provisions to ensure any discharge of water from the site is managed to ensure ANZECC (2000) water quality criteria are met and traffic generated soil erosion is minimised.	X		X	X		X
61.	59.	A Spill Response Plan would be developed to: • Manage the storage of any potential contaminants onsite. • Mitigate the effects of soil contamination by fuels or other chemicals (including emergency response and EPA notification procedures). • Prevent contaminants affecting adjacent pasture and dams.	X	X	X	X	X	X
62.	**60.**	**If water is required from the local water supply authorities, access would be obtained prior to commencement of activities in consultation with:** • **Cobar Water Board, for water from the Cobar Water pipeline.** • **Bogan Shire Council, for water from the local council supply.**	X			X		

NEW No.	OLD No.	Mitigation measure	Solar plant			Transmission line		
63.	61.	Dust suppression activities would be undertaken, including: <u>During construction and decommissioning</u> • A water cart (truck) would be utilised routinely, wetting all access roads and exposed dusty surfaces as appropriate to the conditions of the project site. • Stockpiled topsoil and other materials that exhibit significant dust lift off would be wet down routinely and as appropriate. • Stabilising techniques and/or environmentally acceptable dust palliatives will be utilised if the wetting down of surfaces prove to be ineffective. <u>During operation</u> • Any area that was temporarily used during construction (laydown and trailer complex areas) would be restored back to original condition or re-vegetated with native plants. • Areas that may not have been hard packed but have been disturbed in some form would be treated with environmentally acceptable dust palliatives and / or vegetated (e.g., by means of hydro seeding) with seeds native to the area.	**X**	**X**	**X**	**X**	**X**	**X**
		Cumulative impacts						
64.	62.	Should the Nyngan Scandium Project receive development approval, EMC Metals Corp would be consulted by the Nyngan Solar Plant proponent to determine if construction traffic for the respective proposals could be scheduled to minimise cumulative impacts to third parties.	**X**			**X**		