Development Consent

Section 89E of the Environmental Planning and Assessment Act 1979

As delegate of the Minister for Planning and Infrastructure, under delegation from the Minister enforced from 1 October 2011, the Planning Assessment Commission of NSW (the Commission) approves the development application referred to in Schedule 1, subject to the conditions in Schedule 2.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the development.

Brian Gilligan

Member of the Commission

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Gabrielle Kibble

Member of the Commission

Sydney File No 12/10541-2

SCHEDULE 1

Application No.: SSD-5355

Applicant: AGL Energy Limited (AGL)

Consent Authority: Minister for Planning and Infrastructure

Land: Lot 34 DP751328, Lot 24 DP751328, Lot 8 DP724628, Lot 7300 DP1156652, Lot 25 DP1181299 and the Barrier Highway Road

Reserve

Development: Nyngan Solar Plant, including:

 Photovoltaic arrays incorporating rows of solar panels mounted on fixed steel frames and a series of central inverters and transformers;

- aboveground and underground electrical conduits and cabling to connect the arrays to the inverters and transformers;
- marshalling switchgear to collect the power from the PV arrays;
- · a substation;
- construction of an aboveground 132kV transmission line;
- internal access tracks, upgrades to existing roads, fencing and landscaping; and
- site office and maintenance office building.

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DEFINITIONS

Act, the Environmental Planning and Assessment Act, 1979

Ancillary Facility Temporary facility for construction, including for example an office

and amenities compound, construction compound, batch plant (concrete or bitumen), materials storage compound, maintenance

workshop, testing laboratory or material stockpile area

Applicant AGL Energy Limited (AGL) or anyone else entitled to act on this

development consent including its successors or assigns

CEMP Construction Environmental Management Plan

Construction Includes all work in respect of the development other than:

a) survey, acquisitions, building/ road dilapidation surveys;

- b) investigative drilling, excavation, or salvage;
- c) minor clearing or translocation of native vegetation;
- d) establishing ancillary facilities/ construction work sites (in locations meeting the criteria identified in the conditions of consent);
- e) installation of environmental impact mitigation measures, fencing, enabling works; and
- f) other activities determined by the Environmental Representative to have minimal environmental impact (e.g. minor access roads, minor adjustments to services/ utilities, etc).

Council Bogan Shire Council

Day The period from 7am to 6pm on Monday to Saturday, and 8am to

6pm on Sundays and Public Holidays

Department Department of Planning and Infrastructure

Development The development described in the development application, the EIS

and Submissions Response

DPI Department of Primary Industries

EIS Nyngan Solar Plant Environmental Impact Statement prepared by

ngh environmental dated March 2013

Evening The period from 6pm to 10pm

Feasible Feasible relates to engineering considerations and what is practical

to build

Heritage Encompasses both Aboriginal and historic heritage

including sites that predate European settlement, and a shared history since European settlement such as a shared associations in pastoral landscapes as well as associations linked with the mission

period

Heritage Item An item as defined under the Heritage Act 1977, and assessed as

being of local, State and/ or National heritage significance, and/or an Aboriginal Object or Aboriginal Place as defined under the *National*

Parks and Wildlife Act 1974

Minister for Planning and Infrastructure

Mitigation Activities associated with reducing the impacts of the development

prior to or during those impacts occurring

Night The period from 10pm to 7am on Monday to Saturday, and 10pm to

8am on Sundays and Public Holidays

NOW Department of Primary Industries – NSW Office of Water

OEH Office of Environment and Heritage

Operation Means the operation of the development but does not include

commissioning trials of equipment or temporary use of parts of the

development during construction

Relevant Landowner Means the person/entity who owns the parcel of land the

infrastructure is contained within, unless otherwise defined within the

consent.

RFS NSW Rural Fire Service

RMS Roads and Maritime Services

Sensitive receiver Residence, education institution (e.g. school, university, TAFE

college), health care facility (e.g. nursing home, hospital), religious

facility (e.g. church) and children's day care facility

Site Land referred to in Schedule 1

Submissions Response Nyngan Solar Plant Submissions Report prepared by ngh

environmental dated June 2013

NSW Government Department of Planning and Infrastructure

SCHEDULE 2

PART A ADMINISTRATIVE CONDITIONS

Obligation to Minimise Harm to the Environment

A1. The Applicant shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation or decommissioning of the development.

Terms of consent

- A2. The Applicant shall carry out the development generally in accordance with the:
 - a) State Significant development Application SSD-5355;
 - b) Nyngan Solar Plant Environmental Impact Statement prepared by ngh environmental dated March 2013;
 - c) Nyngan Solar Plant Submissions Report prepared by ngh environmental dated June 2013:
 - d) conditions of this consent.
- A3. If there is any inconsistency between the plans and documentation referred to above, the most recent document shall prevail to the extent of the inconsistency. However, conditions of this consent prevail to the extent of any inconsistency.
- A4. The Applicant shall comply with any reasonable requirement(s) of the Director-General arising from the Department's assessment of:
 - a) any reports, plans or correspondence that are submitted in accordance with this consent;
 and
 - b) the implementation of any actions or measures contained within these documents.

Staging

- A5. The Applicant may elect to construct and/ or operate the development in stages. Where staging is proposed, the Applicant shall submit a Staging Report to the Director-General prior to the commencement of the first proposed stage. The Staging Report shall provide details of:
 - a) how the development would be staged, including general details of work activities associated with each stage and the general timing of when each stage would commence; and
 - b) details of the relevant conditions of development consent, which would apply to each stage and how these shall be complied with across and between the stages of the development.

Where staging of the development is proposed, these conditions of consent are only required to be complied with at the relevant time and to the extent that they are relevant to the specific stage(s).

The Applicant shall ensure that an updated Staging Report (or advice that no changes to staging are proposed) is submitted to the Director-General prior to the commencement of each stage, identifying any changes to the proposed staging or applicable conditions.

Structural Adequacy

A6. The Applicant shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.

Decommissioning

A7. Within one year of decommissioning, the site shall be returned, as far as practicable, to its condition prior to the commencement of construction in consultation with the relevant landowner. All solar panels and associated above ground structures including but not necessarily limited to, the control and facilities building and electrical infrastructure, including

underground infrastructure to a depth of 300 millimetres, shall be removed from the site unless otherwise agreed by the Director-General in consultation with the relevant landowner, except where the, control room or overhead electricity lines are transferred to or in the control of the local electricity network operator. All other elements associated with the development, including site roads, shall be removed unless otherwise agreed to by the Director-General.

- A8. If the solar plant is not used for the generation of electricity for a continuous period of 12 months, it shall be decommissioned by the Applicant, unless otherwise agreed by the Director-General. The Applicant shall keep independently-verified annual records of the use of the solar panels for electricity generation. Copies of these records shall be provided to the Director-General upon request. The solar panels and any associated infrastructure are to be dismantled and removed from the site by the Applicant within 18 months from the date that the solar panels were last used to generate electricity.
- A9. Prior to the commencement of construction, the Applicant shall provide written evidence to the satisfaction of the Director-General that the lease agreements with the relevant landowners have adequate provisions to require that decommissioning occurs in accordance with this consent, and is the responsibility of the Applicant.

This condition does not apply if the Applicant is the landowner.

Compliance

- A10. The Applicant shall ensure that employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities.
- A11. The Applicant shall be responsible for environmental impacts resulting from the actions of all persons that it invites onto the site, including contractors, sub-contractors and visitors.
- A12. In the event of a dispute between the Applicant and a public authority, in relation to an applicable requirement in this consent or relevant matter relating to the development, either party may refer the matter to the Director-General for resolution. The Director-General's determination of any such dispute shall be final and binding on the parties.

PART B ENVIRONMENTAL PERFORMANCE

GENERAL CONDITIONS

Ancillary Facilities

- B1. Unless otherwise approved by the Director-General, the location of Ancillary Facilities shall:
 - a) be located more than 50 metres from a waterway;
 - b) be located within or adjacent to the Site;
 - c) have ready access to the road network;
 - d) be located to minimise the need for heavy vehicles to travel through residential areas:
 - e) be sited on relatively level land;
 - f) be separated from nearest residences by at least 200 metres (or at least 300 metres for a temporary batching plant);
 - g) not require vegetation clearing beyond that already required by the development;
 - h) not impact on heritage sites (including areas of archaeological sensitivity) beyond those already impacted by the development;
 - i) not unreasonably affect the land use of adjacent properties;
 - j) be above the 20 ARI flood level unless a contingency plan to manage flooding is prepared and implemented; and
 - k) provide sufficient area for the storage of raw materials to minimise, to the greatest extent practical, the number of deliveries required outside standard construction hours.

The location of the Ancillary Facilities shall be identified in the CEMP.

B2. The site of all ancillary facilities shall be rehabilitated to at least their pre-construction condition, unless otherwise agreed by the relevant landowner.

Bushfire Risk

- B3. The Applicant shall ensure that all development components on site are designed, constructed and operated to minimise ignition risks, provide for asset protection consistent with relevant NSW Rural Fire Services (RFS) design guidelines (Planning for Bushfire Protection 2006 and Standards for Asset Protection, Undated) and provide for necessary emergency management including appropriate fire-fighting equipment and water supplies on site to respond to a bush fire
- B4. Throughout the operational life of the development, the Applicant shall regularly consult with the local RFS to ensure its familiarity with the development, including the construction timetable and the final location of all infrastructures on the site. The Applicant shall comply with any reasonable request of the local RFS to reduce the risk of bushfire and to enable fast access in emergencies.

Dangerous Goods

- B5. Dangerous goods, as defined by the *Australian Dangerous Goods Code*, shall be stored and handled strictly in accordance with:
 - a) all relevant Australian Standards;
 - b) for liquids, a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and
 - c) the Environment Protection Manual for Authorised Officers: Bunding and Spill Management, technical bulletin (Environment Protection Authority, 1997).

In the event of an inconsistency between the requirements listed from a) to c) above, the most stringent requirement shall prevail to the extent of the inconsistency.

Dust Generation

B6. The Applicant shall construct and operate the development in a manner that minimises dust generation from the site, including wind-blown and traffic-generated dust as far as practicable. All development related activities on the site shall be undertaken with the objective of preventing visible emissions of dust from the site. Should visible dust emissions attributable to the development occur during construction and operation, the Applicant shall identify and implement all practicable dust mitigation measures, including cessation of relevant works during construction, planting ground covers, using dust suppressants as appropriate, such that emissions of visible dust cease.

Water Quality Impact

- B7. Except as may be expressly provided by an Environment Protection Licence for the development, the Applicant shall comply with section 120 of the *Protection of the Environment Operations Act 1997* which prohibits the pollution of waters.
- B8. Works within 40m of a watercourse are to be carried out in accordance with the *Guidelines for Controlled Activities on Waterfront Land (NOW, July 2012).*

Construction Soil and Water Management

B9. Soil and water management measures consistent with *Managing Urban Stormwater - Soils and Construction Vol. 1* (Landcom, 2004) shall be employed during the construction of the development to minimise soil erosion and the discharge of sediment and other pollutants to land and/or waters.

Waterways

B10. Waterway crossings shall be designed and constructed in consultation with NOW and DPI (Fisheries) and consistent with DPI (Fisheries) guidelines *Policy and Guidelines for Fish Friendly Waterway Crossings* (2004) and *Fish Passage Requirements for Waterway Crossings* (2004).

Waste Management

- B11. All waste materials removed from the site shall only be directed to a waste management facility or premises lawfully permitted to accept the materials.
- B12. Waste generated outside the site shall not be received at the site for storage, treatment, processing, reprocessing, or disposal on the site, except as expressly permitted by a licence under the *Protection of the Environment Operations Act 1997*, if such a licence is required in relation to that waste.
- B13. All liquid and/or non-liquid waste generated on the site shall be assessed and classified in accordance with *Waste Classification Guidelines* (Department of Environment, Climate Change and Water, 2009), or any superseding document.

Utilities and Services

B14. Utilities, services and other infrastructure potentially affected by construction and operation shall be identified prior to construction to determine requirements for access to, diversion, protection, and/or support. Consultation with the relevant owner and/or provider of services that are likely to be affected by the development shall be undertaken to make suitable arrangements for access to, diversion, protection, and/or support of the affected infrastructure as required. The cost of any such arrangements shall be borne by the Applicant.

FLORA AND FAUNA

Native Vegetation Impacts

- B15. The clearing of all native vegetation is to be limited to the minimal extent practicably required. Details regarding the procedures for clearing vegetation and minimising the extent of clearing shall be clearly included in the Flora and Fauna Management Plan contained in condition C3(a).
- B16. Tree trunks and major branches from cleared trees should be used, to the fullest extent practicable, to enhance habitat (coarse woody debris) in rehabilitated areas (either in offset

areas or areas adjoining impacted areas) and included in the Construction Flora and Fauna Management Plan contained in condition C3(a).

Fauna Impacts

B17. The Applicant shall design, construct and operate any overhead transmission line connection to the electricity grid with consideration to reasonable and feasible mitigation measures that can be employed to minimise the risk of bird and bat strike into electricity wires.

VISUAL AMENITY

Landscaping Requirements

- B18. Within six months of the commissioning of the development, the Applicant shall prepare and submit a Visual Impact Verification Report for the Director-General's approval. Unless otherwise agreed to by the Director-General, the Visual Impact Verification Report shall confirm the visual impacts at each of the receptors and roadways identified in the Environmental Impact Statement, or subsequently identified in the final design work, as having the potential to be 'highly impacted', considering the final model and layout of generating components on site as well as site specific mitigating factors at the receptors and roadways (such as receptor orientation and intervening screening factors). The Visual Impact Verification Report shall identify all reasonable and feasible screening and landscape planting options available at each receptor and roadways at which potential impacts have been verified to be 'high' including demonstration that these measures have been determined in consultation with affected receptors and relevant road authorities.
- B19. Within 18 months of the approval of the Visual Impact Verification Report by the Director-General (or as otherwise agreed to by the Director-General), the Applicant shall ensure that the measures identified in the Report are implemented at affected receptors and roadways as identified in the Report in consultation with the relevant residents/landowners and road authorities.
- B20. The Applicant shall ensure that any permanent buildings and overhead transmission lines are designed and constructed to minimise visual intrusion to nearest sensitive receptors as far as reasonable and feasible, including appropriate external finishes and landscape planting to screen views.

Rehabilitation and Revegetation

B21. The Applicant shall implement a revegetation and rehabilitation program for all areas of the development footprint which are disturbed during the construction of the development but which are not required for the ongoing operation of the development including temporary construction facility sites and sections of construction access roads. The Applicant shall ensure that all revegetation measures are implemented progressively where possible and in all cases within six months of the cessation of construction activities at the relevant area. Unless otherwise agreed to by the Director-General, the Applicant shall monitor and maintain the health of all revegetated areas until such time that the plantings have been verified by an independent and suitably qualified expert (whose appointment has been agreed to by the Director-General) as being well established, in good health and self sustaining.

NOISE - CONSTRUCTION

Construction Noise

- B22. Construction activities associated with the development shall be undertaken during the following standard construction hours:
 - (a) 7:00am to 6:00pm Mondays to Fridays, inclusive;
 - (b) 8:00am to 1:00pm Saturdays; and
 - (c) at no time on Sundays or public holidays.

Except unless otherwise provided in condition B23.

- B23. Construction works outside of the standard construction hours identified in condition B22 may be undertaken in the following circumstances:
 - (a) construction works that generate noise that is:

- (i) no more that 5 dB(A) above rating background level at any residence in accordance with the *Interim Construction Noise Guideline* (Department of Environment and Climate Change, 2009); and
- (ii) no more than the noise management levels specified in Table 3 of the *Interim Construction Noise Guideline* (Department of Environment and Climate Change, 2009) at other sensitive receivers; *or*
- (b) for the delivery of materials required outside those hours by the NSW Police Force or other authorities for safety reasons; or
- (c) where it is required in an emergency to avoid the loss of life, property and/or to prevent environmental harm;
- (d) works as approved through the out-of-hours work protocol outlined in the Construction Noise Management Plan required under condition C3(d).
- B24. Any activities resulting in impulsive or tonal noise emission (such as rock breaking, rock hammering, pile driving) shall only be undertaken:
 - (a) between the hours of 8:00 am to 5:00 pm Mondays to Fridays;
 - (b) between the hours of 8:00 am to 1:00 pm Saturdays; and
 - (c) in continuous blocks not exceeding three hours each with a minimum respite from those activities and works of not less than one hour between each block.

For the purposes of this condition, 'continuous' includes any period during which there is less than a one hour respite between ceasing and recommencing any of the work the subject of this condition.

B25. The Applicant shall implement all reasonable and feasible measures to minimise noise generation from the construction of the development consistent with the requirements of the Interim Construction Noise Guideline (DECC, July 2009) including noise generated by heavy vehicle haulage and other construction traffic associated with the development

NOISE - OPERATION

Operational Noise Criteria

B26. The Applicant shall take all reasonable measures to minimise noise emissions and vibration from all plant and equipment operated on the site such that they do not exceed noise and vibration criteria derived by application of the NSW Industrial Noise Policy (DECC, 2000) and Assessing Vibration: A Technical Guideline (DECC, 2006).

Operational Noise Design Standards - Overhead Transmission Line

B27. The Applicant shall ensure that any overhead transmission line associated with the development is designed, constructed and operated to minimise the generation of corona and aeolian noise as far as reasonable and feasible at nearest existing sensitive receptors.

TRAFFIC AND TRANSPORT

Road Dilapidation

- B28. Unless otherwise agreed by the Director-General, the Applicant shall commission an independent, qualified person or team to undertake the following in consultation with the relevant road authority:
 - (a) Prior to the commencement of construction of the development, the Applicant shall commission a suitably qualified road infrastructure specialist to assess the condition of all local public roads proposed to be traversed by construction traffic associated with the development (including over-mass or over-dimensional vehicles) in consultation with the relevant road authority, and to identify any upgrade requirements to accommodate development traffic for the duration of construction (including culvert, bridge and drainage design; intersection treatments; vehicle turning requirements; and site access), having regard to traffic volumes. The Pre-Construction Road Report shall be submitted to the Director-General prior to the commencement of construction works, clearly identifying recommendations made by the relevant road authority and how these have been addressed. The Applicant shall ensure that all upgrade measures identified in the report

- are implemented to meet the reasonable requirements of the relevant road authority, prior to the commencement of construction, and at no cost to the relevant road authority;
- (b) upon determining the haulage route(s) for construction vehicles associated with the development, and prior to construction, an independent and qualified person or team shall undertake a Road Dilapidation Report. The report shall assess the current condition of relevant local road(s) and describe mechanisms to restore any damage that may result due to traffic and transport related to the construction of the development. The Report shall be submitted to the relevant road authority for review prior to the commencement of haulage;
- (c) following completion of construction, a subsequent report shall be prepared to assess any damage that may have resulted from the construction of the development; and
- (d) measures undertaken to restore or reinstate roads affected by the development shall be undertaken in a timely manner, in accordance with the reasonable requirements of the relevant road authority, and at the full expense of the Applicant.
- B29. The intersection of the site access road and the Barrier Highway shall be upgraded prior to the commencement of construction to the satisfaction of the RMS and at no cost to the relevant road authority.

HERITAGE

Heritage Impacts

- B30. If during the course of construction the Applicant becomes aware of any previously unidentified Aboriginal object(s), all work likely to affect the object(s) shall cease immediately and the OEH informed in accordance with the *National Parks and Wildlife Act 1974*. In addition, registered Aboriginal stakeholders shall be informed of the finds. Works shall not recommence until an appropriate strategy for managing the objects has been determined in consultation with the OEH and the registered Aboriginal stakeholders and written authorisation from the OEH is received by the Applicant.
- B31. If during the course of construction the Applicant becomes aware of any unexpected historical relic(s), all work likely to affect the relic(s) shall cease immediately and the Heritage Office notified in accordance with the *Heritage Act 1977*. Works shall not recommence until the Applicant receives written authorisation from the Heritage Office.

EASEMENT

B32. 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 to be created prior to commencement of energy generation at the site.

FENCING

- B33. The Applicant shall consult with the relevant landowner(s) adjoining the access road (inclusive of the owner of the property known as "Redlands" who utilises the adjoining road reserve) regarding any additional fencing required along the site access road to ensure any livestock is protected from collision risks.
 - Unless otherwise agreed by the Director-General, the Applicant must install a stock proof fence along the western boundary of Lot 24 DP 751328, or implement other feasible means of protecting livestock from collision risks, where required by the relevant landowner, prior to construction, at the full cost of the Applicant.

PART C ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

ENVIRONMENTAL REPRESENTATIVE

- C1. Prior to the commencement of construction of the development, or as otherwise agreed by the Director-General, the Applicant shall nominate for the approval of the Director-General a suitably qualified and experienced Environment Representative(s) that is independent of the design and construction personnel. The Applicant shall employ the Environmental Representative(s) for the duration of construction, or as otherwise agreed by the Director-General. The Environmental Representative(s) shall:
 - be the principal point of advice in relation to the environmental performance of the development;
 - b) monitor the implementation of environmental management plans and monitoring programs required under this consent and advise the Applicant upon the achievement of these plans/ programs;
 - have responsibility for considering and advising the Applicant on matters specified in the conditions of this consent, and other licences and approvals/consents related to the environmental performance and impacts of the development;
 - d) ensure that environmental auditing is undertaken in accordance with the Applicant's Environmental Management System(s);
 - e) be given the authority to approve/ reject minor amendments to the Construction Environmental Management Plan. What constitutes a "minor" amendment shall be clearly explained in the Construction Environmental Management Plan required under Condition C2;
 - f) be given the authority and independence to require reasonable steps be taken to avoid or minimise unintended or adverse environmental impacts, and failing the effectiveness of such steps, to direct that relevant actions be ceased immediately should an adverse impact on the environment be likely to occur; and
 - g) be consulted in responding to the community concerning the environmental performance of the development where the resolution of points of conflict between the Applicant and the community is required.

ENVIRONMENTAL MANAGEMENT

Construction Environmental Management Plan (CEMP)

- C2. The Applicant shall prepare and implement a Construction Environmental Management Plan in consultation with Council in accordance with the *Guideline for the Preparation of Environmental Management Plans* (Department of Infrastructure, Planning and Natural Resources, 2004) or any replacement guideline. No construction associated with the development shall commence until written approval of this plan has been received from the Director-General or his nominee. The Plan must include:
 - (a) a description of all relevant activities to be undertaken on the site during construction including an indication of stages of construction, where relevant;
 - (b) identification of the potential for cumulative impacts with other construction activities occurring in the vicinity and how such impacts would be managed;
 - (c) details of any construction sites and mitigation, monitoring, management and rehabilitation measures specific to the site compound(s) that would be implemented;
 - (d) statutory and other obligations that the Applicant is required to fulfil during construction including all relevant approvals/consents, consultations and agreements required from authorities and other stakeholders, and key legislation and policies;
 - (e) evidence of consultation with relevant public authorities required under this condition and how issues raised by the agencies have been addressed in the plan;
 - (f) a description of the roles and responsibilities for all relevant employees involved in the construction of the development including relevant training and induction provisions for ensuring that all employees, contractors and sub-contractors are aware of their environmental and compliance obligations under these conditions of consent;
 - (g) details of how the environmental performance of construction will be monitored, and what actions will be taken to address identified potential adverse environmental impacts;

- (h) specific consideration of relevant measures identified in the documents referred to under conditions A2b) and A2c) of this consent;
- (i) the additional requirements of this consent;
- (j) a complaints handling procedure during construction identified in conditions C13 and C14;
- (k) register of construction work hazards and the anticipated level of risk associated with each;
- (I) measures to monitor and manage soil and water impacts in consultation with NOW including: control measures for works close to or involving waterway crossings (including rehabilitation measures following disturbance and monitoring measures and completion criteria to determine rehabilitation success), identification of construction activities that are likely to pose a risk of groundwater interference, and procedures for managing groundwater impacts should they occur;
- (m) measures to monitor and manage flood impacts in consultation with NOW;
- (n) measures to monitor and manage dust emissions including dust generated by traffic on unsealed public roads and unsealed internal access tracks;
- (o) emergency management measures including measures to control bushfires;
- (p) information on water sources, including details on sources and security of water supply and water use on site;
- (q) the Proponent shall ensure that it has sufficient water for all stages of the project, and if necessary, include the provision for a replacement dam. Details for any replacement dam must be prepared in consultation with OEH and NOW and submitted to the Director–General for approval prior to developing the dam; and
- (r) incorporation of the plans identified in C3.
- C3. As part of the Construction Environmental Management Plan required under condition C2 of this consent, the Applicant shall prepare and implement the following:
 - (a) a **Flora and Fauna Management Plan**, developed in consultation with the OEH, to outline measures to protect and minimise loss of native vegetation and native fauna habitat as a result of construction of the development. The Plan shall include, but not necessarily be limited to:
 - (i) plans showing terrestrial vegetation communities; important flora and fauna habitat areas; locations of EECs, native pasture; and areas to be cleared. The plans shall also identify vegetation adjoining the site where this contains important habitat areas and/or threatened species, populations or ecological communities;
 - (ii) methods to manage impacts on flora and fauna species and their habitat which may be directly or indirectly affected by the development, such as location of fencing, procedures for vegetation clearing or soil removal/stockpiling, procedures for rehabilitation of directly impacted native vegetation (where appropriate) and procedures for enhancing native habitat (such as re-locating hollows or installing nesting boxes and managing weeds);
 - (iii) procedures to accurately determine the total area, type and condition of vegetation community to be cleared; and
 - (iv) a procedure to monitor the effectiveness of flora and fauna management, and review management methods where they are found to be ineffective.
 - (b) a Ground Cover Management Plan, developed in consultation with an agronomist, to outline measures to ensure adequate vegetation cover and composition beneath the solar PV array. The Plan shall include, but not necessarily be limited to:
 - (i) procedures to minimise disturbance to ground cover not impacted by the development;
 - (ii) procedures for the stabilisation, rehabilitation and revegetation of disturbed ground cover including reference to field trials where required;

- (iii) weed management measures to control and prevent the spread of noxious weeds:
- (iv) monitoring methods to assess the impact of the development on the ground cover vegetation; and
- a procedure to review management methods where they are found to be ineffective.
- (c) a **Landscape Plan**, to minimise visual impacts from the solar plant. The Plan shall include, but not necessarily be limited to:
 - identification of landscaping objectives and standards based on visual impacts;
 - details of species used to enhance, mitigate and/or augment landscaping to minimise the visual impact of the development, particularly with respect to the impacts on nearby residences;
 - (iii) implementation, management and monitoring strategies to ensure the establishment and ongoing maintenance of landscaped areas; and
 - (iv) a consultation strategy to seek feedback from affected residents and the interested community on the proposed landscape measures.
- (d) a **Construction Noise Management Plan** to manage noise impacts during construction and to identify all feasible and reasonable noise mitigation measures. The Plan shall include, but not necessarily be limited to:
 - (i) details of construction activities and an indicative schedule for construction works;
 - (ii) identification of construction activities that have the potential to generate noise impacts on surrounding land uses, particularly residential areas;
 - (iii) detail the requirements for Noise Impact Statement(s) for discrete work areas, including construction site compounds;
 - (iv) detail what reasonable and feasible actions and measures would be implemented to minimise noise impacts;
 - (v) procedures for notifying sensitive receivers of construction activities that are likely to affect their noise amenity, as well as procedures for dealing with and responding to noise complaints;
 - (vi) an out-of-hours work (OOHW) protocol for the assessment, management and approval of works outside of standard construction hours as defined in condition B22 of this consent, including a risk assessment process under which an Environmental Representative may approve out-of-hour construction activities deemed to be of low environmental risk and refer high risk works for the Director-General's approval. The OOHW protocol shall detail standard assessment, mitigation and notification requirements for high and low risk out-of-hour works, and detail a standard protocol for referring applications to the Director-General; and
 - (vii) a description of how the effectiveness of these actions and measures would be monitored during the proposed works, clearly indicating how often this monitoring would be conducted, the locations where monitoring would take place, how the results of this monitoring would be recorded and reported; and, if any exceedance is detected how any non-compliance would be rectified.
- (e) a Traffic Management Plan to manage traffic conflicts that may be generated during construction. In preparing the Plan, the Applicant shall consult with the Council and RMS. The Plan shall address the requirements of the relevant road authority and shall include, but not necessarily be limited to:
 - the origin, number, size, frequency and final destination of vehicles entering/exiting the site;
 - (ii) loads, weights and lengths of haulage and construction related vehicles and the number of movements of such vehicles;
 - (iii) 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 (particularly the Miandetta to Nyngan route);
- (iv) 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 size and over mass loads to minimise the impact on traffic.
- (v) details of intersection improvement works in accordance with *Austroads Guide to Road Design 2010* and RMS Supplements;
- (vi) demonstration that all statutory responsibilities with regard to road traffic impacts have been complied with;
- (vii) details of measures to minimise interactions between the development and other users of the roads such as the use of fencing, lights, barriers, traffic diversions etc:
- (viii) procedures to manage construction traffic to ensure the safety of the school bus and its passengers, inclusive of driver training and procedures to ensure the adequacy of the management measures;
- (ix) implement all reasonable and feasible measures to reduce the construction related traffic on the Barrier Highway and public roads between the site and the highway:
- (x) schedule construction vehicle movements on site to occur outside school bus hours;
- (xi) procedures to manage construction traffic to ensure the safety of livestock and to minimise disruption to livestock;
- (xii) speed limits to be observed along routes to and from the site and within the site and access road; and
- (xiii) details of the expected behavioural requirements for vehicle drivers travelling to and from the site and within the site.
- (f) an **Aboriginal Heritage Plan** to monitor and manage Aboriginal heritage shall be developed in consultation with the OEH and registered Aboriginal stakeholders, and include the following:
 - (i) details of further archaeological investigations and/or salvage measures to be carried out prior to construction;
 - (ii) procedures for the management of identified objects within the development site;
 - (iii) procedures for dealing with unidentified objects and/or human remains;
 - (iv) Aboriginal cultural heritage induction processes for construction personnel; and
 - (v) procedures for ongoing Aboriginal consultation and involvement.

Upon receipt of the Director-General's approval, the Applicant shall provide a copy of the Plan to the relevant landowner as soon as practicable.

Operational Environmental Management Plan

- C4. The Applicant shall prepare and implement an Operational Environmental Management Plan in accordance with the *Guideline for the Preparation of Environmental Management Plans* (Department of Infrastructure, Planning and Natural Resources, 2004), or any replacement guideline. The Plan shall include but not necessarily be limited to:
 - identification of all statutory and other obligations that the Applicant is required to fulfil in relation to the operation of the development, including all consents, licences, approvals and consultations;
 - (b) a management organisational chart identifying the roles and responsibilities for all relevant employees involved in the operation of the development;
 - (c) overall environmental policies to be applied to the operation of the development;
 - (d) standards and performance measures to be applied to the development, and means by which environmental performance can be periodically monitored, reviewed and improved, (where appropriate) and what actions would be taken in the case that non-compliance

with the requirements of this consent are identified. In particular the following environmental performance issues shall be addressed:

- (i) bushfire hazard and risk management;
- (ii) management and maintenance of offsets;
- (iii) inspection, monitoring and maintenance of all watercourse crossings;
- (iv) management measures for the site, including management of vegetation, soil erosion, dust weed control and landholder liaison.
- (e) the environmental monitoring requirements outlined under this consent;
- (f) measures to monitor and manage flood impacts in consultation with NOW;
- (g) information on water sources, including details on sources and security of water supply and water use on site;
- (h) complaints handling procedures as identified in conditions C13 to C15;
- (i) specific consideration of relevant measures to address any requirements identified in the documents referred to under conditions A2b) and A2c) of this consent; and
- (j) management policies to ensure that environmental performance goals are met and comply with the conditions of this consent.

The Plan shall be submitted for the approval of the Director-General no later than one month prior to the commencement of Operation of the development or within such period as otherwise agreed by the Director-General. Operation shall not commence until written approval has been received from the Director-General. Upon receipt of the Director-General's approval, the Applicant shall make the Plan publicly available as soon as practicable and provide a copy of the Plan to the relevant landowner as soon as practicable.

Biodiversity Offset Management Package

- C5. Following final design and prior to the commencement of construction, or as otherwise agreed to by the Director-General, the Applicant shall develop and submit a Biodiversity Offset Management Package for the approval of the Director-General. The package shall detail how the ecological values lost as a result of the development will be offset. The Biodiversity Offset Management Package shall be developed in consultation with the OEH and shall (unless otherwise agreed by the Director-General) include, but not necessarily be limited to:
 - (a) an assessment of all native vegetation communities and threatened species habitat, supported by a suitable metric (such as the Biobanking Assessment Methodology), that will either be directly or indirectly impacted by the proposal;
 - (b) the objectives and biodiversity outcomes to be achieved (including 'improve or maintain' biodiversity values), and the adequacy of the proposed offset considered;
 - (c) the final suite of the biodiversity offset measures selected and secured including but not necessarily limited to;
 - i) an offset proposal which is supported by a suitable metric method (such as the Biobanking Assessment Methodology);
 - ii) details of the relative condition and values of communities on the offset site in comparison to those to be impacted:
 - iii) proposed management actions and expected gains;
 - (d) the monitoring requirements for compensatory habitat works and other biodiversity offset measures proposed to ensure the outcomes of the package are achieved, including:
 - i) the monitoring of the condition of species and ecological communities at offset locations;
 - ii) the methodology for the monitoring program(s), including the number and location of offset monitoring sites, and the sampling frequency at these sites;
 - iii) provisions for the annual reporting of the monitoring results for a set period of time as determined in consultation with the OEH; and
 - (e) timing and responsibilities for the implementation of the provisions of the Package.

Land offsets shall be consistent with the *Principles for the use of Biodiversity Offsets in NSW* (NSW Office of Environment and Heritage, June 2011). Any land offset shall be enduring and

be secured by a conservation mechanism which protects and manages the land in perpetuity. Where land offsets cannot solely achieve compensation for the loss of habitat, additional measures shall be provided to collectively deliver an improved or maintained biodiversity outcome for the region.

Where monitoring referred to in condition (d) indicates that biodiversity outcomes are not being achieved, remedial actions shall be undertaken to ensure that the objectives of the Biodiversity Offset Package are achieved.

Decommissioning Management Plan

- C6. Prior to the commencement of decommissioning, or as otherwise agreed by the Director-General, the Applicant shall prepare (in consultation with the relevant landowner) and implement (following approval) a **Decommissioning Management Plan** for the development. The Plan shall outline the environmental management practices and procedures that are to be followed during decommissioning, and shall be prepared in consultation with the relevant agencies and in accordance with the *Guideline for the Preparation of Environmental Management Plans* (Department of Infrastructure, Planning and Natural Resources, 2004) or any replacement guideline. The Plan shall include, but not necessarily be limited to:
 - (a) a description of activities to be undertaken during decommissioning of the development (including staging and scheduling);
 - statutory and other obligations the Applicant is required to fulfil during decommissioning, including approval/consents, consultations and agreements required from authorities and other stakeholders under key legislation and policies;
 - (c) a description of the roles and responsibilities for relevant employees involved in the decommissioning of the development, including relevant training and induction provisions for ensuring that employees, including contractors and sub-contractors are aware of their environmental and compliance obligations under these conditions of consent;
 - (d) an environmental risk analysis to identify the key environmental performance issues associated with the decommissioning phase; and
 - (e) details of how environmental performance will be managed and monitored to meet acceptable outcomes, including what actions will be taken to address identified potential adverse environmental impacts (including any impacts arising from the staging of the decommissioning of the development). In particular, the following environmental performance issues shall be addressed in the Plan:
 - (i) compounds and ancillary facilities management;
 - (ii) noise and vibration;
 - (iii) traffic and access:
 - (iv) soil and water quality and spoil management;
 - (v) air quality and dust management;
 - (vi) hazardous material and waste management; and
 - (vii) hazard and risk management, including bushfire risk.

The Plan shall be submitted for the approval of the Director-General no later than one month prior to the commencement of decommissioning, or as otherwise agreed by the Director-General. The Plan may be prepared in stages, however, decommissioning works shall not commence until written approval has been received from the Director-General. Upon receipt of the Director-General's approval, the Applicant shall provide a copy of the Plan to the relevant landowner as soon as practicable.

Decommissioning Road Dilapidation

- C7. Unless otherwise agreed by the Director-General, the Applicant shall commission an independent, qualified person or team to undertake the following in consultation with the relevant road authority:
 - (a) Prior to the commencement of decommissioning of the development, the Applicant shall commission a suitably qualified road infrastructure specialist to assess the condition of all public roads proposed to be traversed by decommissioning traffic associated with the development (including over-mass or over-dimensional vehicles) in consultation with the

relevant road authority, and to identify any upgrade requirements to accommodate development traffic for the duration of decommissioning (including culvert, bridge and drainage design; intersection treatments; vehicle turning requirements; and site access), having regard to traffic volumes. The **Decommissioning Road Report** shall be submitted to the Director-General prior to the commencement of decommissioning works, clearly identifying recommendations made by the relevant road authority and how these have been addressed. The Applicant shall ensure that all upgrade measures identified in the report are implemented to meet the reasonable requirements of the relevant road authority, prior to the commencement of decommissioning, at no cost to the relevant road authority.

(b) upon determining the haulage route(s) for decommissioning vehicles associated with the development, and prior to decommissioning, an independent and qualified person or team shall undertake a **Road Dilapidation Report**. The report shall assess the current condition of the road(s) and describe mechanisms to restore any damage that may result due to traffic and transport related to the construction of the development. The Report shall be submitted to the relevant road authority for review prior to the commencement of haulage.

Following completion of decommissioning, a subsequent report shall be prepared to assess any damage that may have resulted from the decommissioning of the development.

Measures undertaken to restore or reinstate roads affected by the development shall be undertaken in a timely manner, in accordance with the reasonable requirements of the relevant road authority, and at the full expense of the Applicant.

REPORTING

Incident Reporting

C8. The Applicant shall notify, at the earliest opportunity, the Director-General and any other relevant agencies of any incident that has caused, or threatens to cause, material harm to the environment. For any other incident associated with the development, the Applicant shall notify the Director-General and any other relevant agencies as soon as practicable after the Applicant becomes aware of the incident. Within 7 days of the date of the incident, the Applicant shall provide the Director-General and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.

Regular Reporting

C9. The Applicant shall provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.

COMMUNITY

Community Information, Consultation and Involvement

C10. Subject to reasonable confidentiality requirements, the Applicant shall make all documents required under this consent available for public inspection on request.

Provision of Electronic Information

- C11. Prior to the commencement of construction, the Applicant shall establish a dedicated website or maintain dedicated pages within its existing website for the provision of electronic information associated with the development. The Applicant shall publish and maintain up-to-date information on this website or dedicated pages including, but not necessarily limited to:
 - (a) the status of the development:
 - (b) a copy of this consent and any future modification to this consent;
 - (c) a copy of each relevant environmental consent, licence or permit required and obtained in relation to the development;
 - (d) a copy of each plan, report, or monitoring program required by this consent; and
 - (e) details of the outcomes of compliance reviews and audits of the development.

Community Information Plan

- C12. Prior to the commencement of construction, the Applicant shall prepare and implement a Community Information Plan which sets out the community communication and consultation processes to be implemented during construction and operation of the development. The Plan shall include but not be limited to:
 - (a) procedures to inform the local community of planned investigations and construction activities, including blasting works (if any);
 - (b) procedures to inform the relevant community of construction traffic routes and any potential disruptions to traffic flows and amenity impacts;
 - (c) procedures to consult with local landowners/residents with regard to construction traffic to ensure the safety of livestock and to limit disruption to livestock movements;
 - (d) procedures to inform the community where work outside the construction hours specified in condition B22, in particular noisy activities, has been approved; and
 - (e) procedures to inform and consult with the relevant landowner to rehabilitate impacted

Complaints Procedure

- C13. Prior to the commencement of construction, the Applicant shall ensure that the following are available for community complaints for the life of the development (including construction and operation) or as otherwise agreed by the Director-General:
 - a) a 24 hour telephone number on which complaints about construction and operational activities at the site may be registered;
 - b) a postal address to which written complaints may be sent; and
 - c) an email address to which electronic complaints may be transmitted.

The telephone number, postal address and e-mail address shall be advertised in a newspaper circulating in the local area on at least one occasion prior to the commencement of construction; and at six-monthly intervals during construction and for a period of two years following commencement of operation of the development. These details shall also be provided on the Applicant's internet site required by condition C11. The telephone number, the postal address and the email address shall be displayed on a sign near the entrance to the construction site(s), in a position that is clearly visible to the public.

- C14. The Applicant shall record details of all complaints received through the means listed in condition C13 of this consent in an up-to-date Complaints Register. The Register shall record, but not necessarily be limited to:
 - a) the date and time, of the complaint;
 - b) the means by which the complaint was made (telephone, mail or email);
 - c) any personal details of the complainant that were provided, or if no details were provided, a note to that effect;
 - d) the nature of the complaint;
 - e) any action(s) taken by the Applicant in relation to the complaint, including timeframes for implementing the action; and
 - f) if no action was taken by the Applicant in relation to the complaint, the reason(s) why no action was taken.

The Complaints Register shall be made available for inspection by the Director-General upon request.

C15. The Applicant shall provide an initial response to any complaints made in relation to the development during construction or operation within 48 hours of the complaint being made. The response and any subsequent action taken shall be recorded in accordance with condition C14. Any subsequent detailed response or action is to be provided within two weeks.

COMPLIANCE

Compliance Tracking Program

- C16. Prior to the commencement of construction, the Applicant shall develop and implement a Compliance Tracking Program, to track compliance with the requirements of this consent during the construction and operation of the development and shall include, but not necessarily be limited to:
 - a) provisions for periodic reporting of compliance status to the Director-General including at least prior to the commencement of construction of the development, prior to the commencement of operation of the development and within two years of operation commencement;
 - b) a program for independent environmental auditing in accordance with AS/NZ ISO 19011:2003 Guidelines for Quality and/or Environmental Management Systems Auditing;
 - c) procedures for rectifying any non-compliance identified during environmental auditing or review of compliance;
 - d) mechanisms for recording environmental incidents and actions taken in response to those incidents;
 - e) provisions for reporting environmental incidents to the Director-General during construction and operation; and
 - f) provisions for ensuring all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities.

NSW Government Department of Planning and Infrastructure