

New England Solar - Environmental Management Strategy



Stage 1b – 400MWac – Operations Stage 2a – 320MWac - Construction Stage 3a – 200MW/2hr - Construction

21 December 2023



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ACEN Australia Suite 2, Level 2 15 Castray Esplanade Battery Point, TAS 7004

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1 Introduction

1.1 Approved Project

New England Solar Project (NES) was granted Development Consent from the Department of Planning, Infrastructure and Environment (DPIE) (now the Department of Planning and Environment [DPE]) on 9 March 2020 (SSD 9255). The Development Consent was most recently modified on 26 May 2023 (Modification 2), after receiving approval for Modification 1 on 9 Feb 2021. A consolidated consent is provided in Appendix C. The approved General Layout is shown in Figure 1-1.

1.1.1 General project description

ACEN Australia Pty Ltd (ACEN Australia) (formerly named UPC Renewables Australia Pty Ltd) has approval to develop the New England Solar and Battery Project; a significant gridconnected solar and battery energy storage system (BESS) project along with associated infrastructure (the Project), approximately 6 kilometres (km) east of the township of Uralla, which lies approximately 19 km south of Armidale, in the Uralla Shire local government area (LGA) (hereafter referred to as NES). NES is within the New England Renewable Energy Zone (REZ). NES was approved, subject to conditions, by the New South Wales (NSW) Independent Planning Commission (IPC) on 9 March 2020 (SSD 9255).

NES will be constructed in the following stages:

- Stage 1a: Construction of a 400 megawatt (MW) solar farm within the Northern Array, which commenced on 7 February 2022 and is expected to be completed by Q4 2023
- Stage 1b: Operations of 400MW solar
- Stage 2a: Construction of a 320 megawatt (MW) solar farm within the Central Array, which is expected to commence by Q1 2024
- Stage 2b: Operations of 320MW solar
- Stage 3a: Construction of 200MW/2hr BESS within the approved Substation/BESS area, which is expected to commence by Q1 2024
- Stage 3b: Operations of 200MW/2hr BESS
- Stage 4a: Construction of 1200MW/2hr BESS within the approved Substation/BESS area
- Stage 4b: Operations of 1200MW/2hr BESS
- Stage 5: Decommissioning

Further details are provided in **Table 1** and below.

Table 1-1 Summary of Key Activities across Stages of the New England Project

Stage	Description	Key Activities*	Timeframe
Stage 1a	Construction of a 400 megawatt (MW) solar farm within the Northern Array	Site compound Fencing works, including security fencing Main Access Road construction Internal Access Roads including drainage and rehabilitation Solar array works that include: • General site wide cut and fill earthworks • Piling installation • Tracker installation • Above ground and below ground cable installation and termination • Module installation • Module installation • Module installation • Substation, Switchyard and control buildings works that includes: • Earthworks • Structures and Footings • Gantries and HV Switchgear • Transformer installation and connection (Substation only) • Control building installations (both Substation and Switchyard) Other: • Operations & maintenance building • Cold Commissioning works • Hot compliance to AEMO requirements • Site wide rehabilitation • All other associated infrastructure	Nearing completion
Stage 1b	Operation of 400MW solar Farm	 Operation of the solar farm for indicatively 30 year, including: Solar module maintenance including cleaning Vegetation & infrastructure maintenance Electrical equipment maintenance, upgrade, repair and replacement, as required 	Est: Oct '23 – '53
Stage 2a	Construction of a 320MW solar farm within the Central Array	 Fencing works, including security fencing Internal Access roads including drainage and rehabilitation Solar array works that include: General site wide cut to fill earthworks Piling installation Tracker installation Above ground and below ground cable installation and termination Module installation Substation and control buildings works that includes: 	October '23

		 Structures and Footings HV Switchgear Transformer installation and connection Substation only Control building installation inside Substation Other: Operations & maintenance building Cold Commissioning works Hot Commissioning works including Hold Point testing for compliance to AEMO requirements Site wide rehabilitation All other associated infrastructure 	
Stage 2b	Operation of 320MW Solar Farm	 Operation of the solar farm for indicatively 30 year, including: Solar module maintenance including cleaning Vegetation & infrastructure maintenance Electrical equipment maintenance, upgrade, repair and replacement, as required 	July '25 - '55 [#]
Stage 3a	200MW/2hr BESS construction, commissioning, and operations including switchyard expansion works	 Bulk earthworks Internal Access Road works Security fencing Landscaping and rehabilitation Earth grid installation Stormwater drainage system Spill oil drainage system Above ground and below ground cable installation and termination Electrical pit and conduit system installation Equipment, structure and building foundations All associated ancillary equipment Delivery and landing of the battery units Control and switchgear buildings installation Mechanical and electrical installation of equipment inclusive of structural erection, cable reticulation and terminations Substation expansion, as required Switchyard expansion, as required Testing and commissioning, specifically energisation of the battery units and hold point testing of the BESS. 	Est: April '24
Stage 3b	Operations of 200MW/2hr BESS	 Operation of the BESS for indicatively 30 year, including: Solar module maintenance including cleaning Vegetation & infrastructure maintenance Electrical equipment maintenance, upgrade, repair and replacement, as required 	'26 – '46
Stage 4a	1200MW/2hr BESS construction, commissioning, and operations including switchyard expansion works	 Bulk earthworks Internal Access Road works Security fencing Landscaping and rehabilitation Earth grid installation Stormwater drainage system Spill oil drainage system Above ground and below ground cable installation and termination 	Est: '30

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		 Electrical pit and conduit system installation Equipment, structure and building foundations All associated ancillary equipment Delivery and landing of the battery units Control and switchgear buildings installation Mechanical and electrical installation of equipment inclusive of structural erection, cable reticulation and terminations Substation expansion, as required Switchyard expansion, as required Testing and commissioning, specifically energisation of the battery units and hold point testing of the BESS. 	
Stage 4b	Operations of 1200MW/2hr BESS	 Operation of the BESS for indicatively 20 year, including: Solar module maintenance including cleaning Vegetation & infrastructure maintenance Electrical equipment maintenance, upgrade, repair and replacement, as required 	'35 – '55
Stage 5	Decommissioning at end of life	Full decommissioning of the site including removal and appropriate disposal of all components.	Est: '55 – '58 [#]

*Included Key Activities, but not limited to the listed items

The operational lifespan of the project would be approximately 30 years, unless the facility is re-powered at the end of the photovoltaic modules' and/or BESS infrastructure operational life

Key components of NES development are summarised in Table 1-2 and Figure 1-1.

Table 1-2 Key components of NES

Aspect	Description
NES project summary	 The NES project includes: A generating capacity of approximately 720 (MWac), including about 400 MWac generated by the northern arrays (Stage 1) and 320 MWac from the central arrays (Stage 2). Approximately 1.4 million single-axis tracking solar panels (up to 4.3 metres (m) high) and 150 power conversion units (PCU) (up to 2.7 m high). A grid substation in the northern array area and connection to TransGrid's 330 kilovolt (kV) transmission line. A lithium-ion battery storage facility (1,400 MW/2,800 MWh) located adjacent to the substation and within a number of small enclosures (up to 2.9 m high) or larger battery buildings (up to 5.5 m high) (Stage 3 & 4). Internal access tracks, staff amenities, maintenance buildings (up to 8 m high), offices, laydown areas, car parking and security fencing. Subdivision of land within the site for the TransGrid switchyard.
Project area	Site: 3,655 hectares (ha).

	 Total NES footprint: 2,159 ha Stage 1 footprint: 1,159 ha Stage 2 footprint: 985 ha Stage 3 footprint: 15 ha
Access route	All vehicles will access the site via the New England Highway, Barleyfields Road (North) and Big Ridge Road).
Site entry and road upgrades	 Two new site entry points are constructed on Big Ridge Road with a rural property access type. Upgrades to the intersection of: The New England Highway and Barleyfields Road (North), including a Channelised Right Turn (CHR) treatment. Barleyfields Road (North) and Big Ridge Road, including a Basic Left Turn (BAL) treatment. Upgrades have been made to: Barleyfields Road (North) between the New England Highway and Big Ridge Road, including sealing to a width of 7.2 m and 1 m gravel shoulders. Big Ridge Road including sealing sections to a width of 7.2 m and 1 m gravel shoulders, and upgrading a section with a gravel surface to a width of 8.7 m.
Rail transport	Construction materials may be transported to the site via a combination of road and rail (average of 2 trains per week). A train unloading area and materials storage area may be constructed adjacent to the Main Northern Railway. Materials will be stored in shipping containers (up to 2.9 m high) until required on-site.
Construction	Construction materials may be transported to the site via a combination of road and rail (average of 2 trains per week). Construction hours limited to Monday to Friday 7 am to 6 pm, and Saturday 8 am to 1 pm.
Operation	The expected operational life of NES is approximately 30 years. However, this may involve infrastructure upgrades that could extend the operational life.
Decommissioning and rehabilitation	The NES project also includes decommissioning at the end of the NES project life, which will involve removing all infrastructure.
Hours of operation	Daily operations and maintenance will be undertaken Monday to Friday 7 am to 6 pm, and Saturday 8 am to 1 pm. NES will be operational 24/7.

Subdivision	Subdivision of the lots on which the approved TransGrid Switchyard is located has been completed.
Employment	Approximately 700 construction jobs and up to 15 full-time operational jobs.
Capital investment value	\$1.268 billion.

1.2 Working Hours

1.2.1 Construction

Unless approval has been obtained from the Secretary, construction, upgrading and decommissioning activities on site will be undertaken between the following hours:

- 7 am to 6 pm Monday to Friday;
- 8 am to 1 pm Saturdays; and
- at no time on Sundays and NSW public holidays.

The following construction, upgrading or decommissioning activities may be undertaken outside these hours without the approval of the Secretary:

- the delivery of materials as requested by the NSW Police Force or other authorities for safety reasons; or
- emergency work to avoid the loss of life, property and/or material harm to the environment.

1.2.2 Operations

Once commissioned, NES will operate 24 hours a day. The Site will be staffed during daylight hours, generally from:

• 7 am to 6 pm Monday to Friday (staff on-call during weekends and public holidays).

1.3 Applicant

ACEN Australia (previously UPC\AC Renewables Australia Pty Ltd) is the NES Applicant.

1.4 Contractors

Green Light Contractors Pty Ltd (GLC) was the Engineering Procurement and Construction (EPC) contractor engaged by ACEN Australia to construct Stage 1a of NES and will continue into Operations for Stage 1b for two years.

Multiple Contractors will be engaged by ACEN Australia for the remaining Stages of work.

All Contractors engaged by ACEN Australia will be responsible to implement all environmental management requirements and to construct, operate, upgrade and decommission in accordance with the Development Consent SSD 9255.

1.5 Strategy Function

This Environmental Management Strategy (EMS) has been prepared to satisfy Schedule 4, Condition 1 of the Development Consent SSD 9255 which requires:

- 1. Prior to commencing the development, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must:
 - a. provide the strategic framework for environmental management of the development;
 - b. identify the statutory approvals that apply to the development;
 - c. describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;
 - d. describe the procedures that would be implemented to:
 - *i.* keep the local community and relevant agencies informed about the operation and environmental performance of the development;
 - ii. receive, handle, respond to, and record complaints;
 - *iii.* resolve any disputes that may arise;
 - *iv.* respond to any non-compliance;
 - v. respond to emergencies; and
 - e. include:
 - *i.* references to any plans approved under the conditions of this consent; and
 - *ii.* a clear plan depicting all the monitoring to be carried out in relation to the development.

Following the Secretary's approval, the Applicant must implement the Environmental Management Strategy.

The Development Consent defines 'construction' as:

The construction of the development, including but not limited to the carrying out of any earthworks on site and the construction of solar panels and any ancillary infrastructure (but excludes road upgrades or maintenance works to the public road network, building/road dilapidation surveys, installation of fencing, artefact survey and/or salvage, overhead line safety marking and geotechnical drilling and/or surveying).

The Development Consent defines 'operation' as:

The operation of the development, but does not include commissioning, trials of equipment or the use of temporary facilities.

The operation of NES in this EMS is taken to mean when NES is generating its nameplate capacity into the grid.





Figure 1-1 Approved layout (Development Consent SSD 9255, May 2023)

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1.6 Structure

Table 1-3 summarises how the structure and scope of this EMS has been prepared so as to be consistent with the conditions of Development Consent SSD 9255. This cross referencing is to assist with future review, auditing and compliance management of NES.

Table 1-3 EMS Structure

Section	Content
2	Provides the strategic framework for the environmental management of NES, including other environmental strategies, plans and programs related to the EMS.
3	Identifies the statutory approvals that apply to NES.
4	Identifies the role, responsibility, authority and accountability of all key personnel involved in the environmental management of NES.
5	Describes the procedures that will be implemented to keep the local community and relevant agencies informed about the operation and environmental performance of NES.
6	Specifies the procedures that will be implemented to receive, handle, respond to and record complaints.
7	Describes the procedures that will be implemented to resolve any disputes that may arise.
8	Describes the procedures that will be implemented to respond to any non-compliance.
9	Describes the notification procedures that will be implemented in the event of an incident.
10	Describes the procedures that will be implemented to respond to emergencies.
11	Describes the monitoring to be carried out in relation to the development.

1.7 Strategy Review and Revision

As per Development Consent SSD 9255 Schedule 4 Condition 2, the Applicant must:

- a) update the strategies, plans or programs required under this consent to the satisfaction of the Secretary prior to carrying out any upgrading or decommissioning activities on site, and
- b) review and, if necessary, revise the strategies, plans or programs required under this consent to the satisfaction of the Secretary within 1 month of the:
 - submission of an incident report under condition 7 of Schedule 4,
 - submission of an audit report under condition 9 of Schedule 4, and

Environmental Management Strategy New England Solar c) review and, if necessary, revise the strategies, plans or programs required under this consent to the satisfaction of the Secretary prior to carrying out works associated with any modification to the conditions of this consent.

ACEN Australia will also undertake annual management compliance reviews to assess the implementation of commitments made in the EMS and ensure compliance with the Development Consent.

Any changes to the management plans will be approved by the Secretary, before implementing those changes, and in consultation with relevant agencies.

1.7.1 Review

This plan will be reviewed (and updated if necessary) in the following circumstances:

- Prior to the commencement of a future Stage
- Prior to carrying out any upgrading or decommissioning activities on site (in accordance with Schedule 4, Condition 2a of the development consent).
- Within 1 month of the following (in accordance with Schedule 4, Condition 1 of the development consent):
 - Submission of an incident report under Schedule 4, Condition 7;
 - Submission of an audit report under Schedule 4, Condition 9; or
- Prior to carrying out works associated with any modification to the conditions of the development consent (in accordance with Schedule 4, Condition 2c of the development consent).

Any updates to the Environmental Management Strategy are to be to the satisfaction of the Secretary. As per Schedule 4 Condition 3, with the agreement of the Secretary, the Applicant may prepare any revised strategy, plan or program without undertaking consultation with all the parties referred to under the relevant condition of this consent.

2 Strategic Framework

2.1 Environmental Strategy

A strategy is a plan of action designed to achieve an overall aim. ACEN Australia's and its relevant contractors aim is to design, construct, operate, upgrade and decommission NES in full compliance with Development Consent SSD 9255.

Schedule 2, Condition 2 states:

The Applicant must carry out the development:

- (a) generally in accordance with the EIS; and
- (b) in accordance with the conditions of this consent.

Note: The general layout of the development is shown in Appendix 1 (this is also shown in Figure 1-1 within Section 1.3 of this EMS).

In the context above, Environmental Impact Statement (EIS) includes:

- New England Solar Farm Environmental Impact Statement (EMM, Feb 2019a).
- New England Solar Farm Amendment Report (EMM, June 2019b).
- New England Solar Farm Submissions Report (EMM, June 2019c).
- New England Solar Farm Additional Information (EMM, Oct 2019d).
- New England Solar Farm Additional Information (EMM, Dec 2019e).
- Subdivision Plan (Development Consent Appendix 3).
- Additional Information provided to NSW IPC (UPC Renewables, 7 Feb 2020a).
- Additional Information provided to NSW IPC (UPC Renewables, 18 Feb 2020b).
- New England Solar Farm Modification 1 Report (EMM, Dec 2020).
- New England Solar and Battery Project Modification 2 Report (EMM, Dec 2022).
- New England Solar and Battery Project Submissions Report (EMM, Jan 2023a).
- New England Solar and Battery Project Amendment Report (EMM, Jan 2023b).
- New England Solar and Battery Project Additional Information (ACEN, April 2023).

The EMS objective is to therefore comply with all Conditions of the Development Consent and the documents above that form the 'EIS'.

Section 2.2 sets out in further detail the various environmental strategies, plans and programs required by either the Development Consent or the EIS, all of which sit under the ultimate direction of this EMS.

As the NES Applicant, it is ACEN Australia's ultimate responsibility to ensure NES is designed, built, operated, upgraded and decommissioned according to the Development Consent. ACEN Australia's Environmental Policy (refer to Appendix A) sets out commitments to:

- Comply with environmental laws and regulations in all work locations as an absolute minimum (refer to Section 3 of this EMS, and the Construction and Operational Environmental Management Plans which sits under this overall EMS)
- Understand and manage potential environmental risks at all work locations (refer to Sections 4.5, 9.4, and the relevant *Environmental Management Plans which* sit under this overall EMS)
- Contribute to the overall health and resiliency of ecosystems in all work locations (refer to the *Biodiversity Management Plan [BMP]* which sits under this overall EMS)
- *Participate in integrated approaches to land use planning* (the Project will be undertaken as per Development Consent SSD 9255)
- Identify and implement opportunities for efficient energy and water usage (refer to erosion and sediment controls as per the relevant *Soil and Water Management Plans* (*SWMP*)
- Identify and implement opportunities for waste avoidance and minimisation (refer to the relevant Waste Management Plans [WMP] which sits under the relevant Environmental Management Plans)
- Report annually to all stakeholders on our environmental activities (refer to Section 5.2).

Each Contractor will have its own Environmental Policy (refer to Appendix B) which will assist it in ensuring these policy measures of the Applicant are met during the Project. The mechanism for achieving this is for a clear delineation of contractually enforced responsibilities between the Applicant (ACEN Australia) and each of the Contractors. Figure 2-1 below shows how the EMS sits within the overall relationships between the relevant parties.



Figure 2-1 EMS Structure



2.2 Environmental Strategies, Plans and Programs

Figure 2-2 shows the various environmental strategies, plans and programs required by either the Development Consent or the EIS, all of which sit under the ultimate direction of this EMS. Table 2.1 describes the timing of preparation or approval of each document.

Each of these documents will identify procedures and work practices designed to minimise adverse environmental impacts and comply with the Development Consent. They will each include, where appropriate, performance criteria and the targeted monitoring.

Any changes to these management plans will be approved by the Secretary, before implementing the changes, and in consultation with relevant agencies (unless the Secretary agrees otherwise).



Environmental Management Strategy (EMS) V5, 17 Feb 23 – Covers all Stages of works. Updated as needed.						
CEMP Stage 1a – V3 dated 14 April '23	OEMP Stage 1b – In preparation	CEMP Stage 2a – In preparation	OEMP Stage 2b – Future Plan	CEMP Stage 3a – In preparation	OEMP Stage 3b – Future Plan	
Aboriginal Heritage Management Plan (AHMP) - V8.	Aboriginal Heritage Management Plan (AHMP) – From V9					
Traffic Management plan (TMP) - Rev7. 23 Dec '22	Traffic Management plan (TMP) – Fro	om Rev8				
Fire and Emergency Response Plan (FERP)	Fire and Emergency Response Plan (F	ERP)		BESS = Fire Safetv Studv	ency Response Plan (FERP)	
Historical Heritage Management Plan (HHMP) - Ver5. 25 Nov '22	Historical Heritage Management Plan	n (HHMP) – From V6				
Accommodation and Employment Strategy - Ver3, 19	Accommodation and Employment S	trategy – From Ver 4				
Biodiversity Management Plan – Rev8. 19 Dec '22	Biodiversity Management Plan – Fro	m Rev 9				
Water Supply Strategy – Rev 3 19 Feb '21	Water Supply Strategy – From Rev 4	,				
Soil and Water Management Plan - Rev 4. 4 Feb 2022		Soil and Water Management Plan		Soil and Water Management Plan		
Erosion and Sediment Control plan - Rev 1. 15 Oct 2021		Erosion and Sediment Control Plan		Erosion and Sediment Control Plan		
Waste Management Plan – Rev 4 approved by USC 22 March '22		Waste Management Plan		Waste Management Plan		
Noise and Vibration Management Plan – Rev 5		Noise and Vibration Management Plan		Noise and Vibration Management Plan		

Figure 2-2 EMS Document Framework

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Plan	Stage 1b	Stage 2a	Stage 3a	When
Construction Environmental Management Plan (CEMP)		Х	х	Prior to commencement of construction for the relevant stage.
Operational Environmental Management Plan (OEMP)	х			Prior to commencing operations for the relevant stage.
Decommissioning & Rehabilitation Plan	х			Within 3 years of commencement of operations.
Final Layout Plans		Х	х	Prior to commencement of construction.
Revised Layout Plans	x	Х	×	Provided these upgrades remain within the approved development footprint of the site. Prior to carrying out any such upgrades, the Applicant must provide revised layout plans and project details of the development to the Secretary incorporating the proposed upgrade.
Work as Executed Plans	х	x	х	Prior to commencing operations or following the upgrades of any solar panels or ancillary infrastructure.
Aboriginal Heritage Management Plan (AHMP)	х	Х	х	Prior to commencement of construction and operations.
Accommodation and Employment Strategy (AES)	х	Х	х	Prior to commencement of construction and operations.
Biodiversity Management Plan (BMP)	х	Х	х	Prior to commencement of construction and operations.
Fire and Emergency Response Plan (FERP)	х	Х	х	Prior to commencement of construction and operations.
Fire Safety Study			х	Prior to commencing construction of the BESS.
Historical Heritage Management Plan (HHMP)	Х	Х	х	Prior to commencement of construction and operations.

Construction Noise and Vibration Management Plan (CNVMP)		х	x	Prior to commencement of construction.
Soil and Water Management Plan (SWMP)	х	х	х	Prior to commencement of construction and operations.
Traffic Management Plan (TMP)	Х	Х	Х	Prior to commencement of construction and operations.
Waste Management Strategy (WMS)	Х	Х	Х	Prior to commencement of construction and operations.
Water Supply Strategy (WSS)	Х	Х	Х	Prior to commencement of construction and operations.

2.3 Amenity

2.3.1 Dust Management measures

In accordance with Condition 14 of Schedule 3, to minimise the dust generated by the development, all contractors will implement the following dust management measures:

- avoiding, where possible, vegetation removal, earthworks and trafficking plant and vehicles over unsealed surfaces during dry and/or windy conditions
- grading and ongoing maintenance of internal access roads to reduce potential to deteriorate and generate dust
- minimising vegetation clearing as far as possible, and re-vegetating and/or rehabilitating disturbed land surfaces and stockpiles as soon as practicable as outlined in the BMP, SWMP and ESCP
- enforcing on-site speed limits by posting signs on site, briefing project staff and visitors through inductions and prestart talks, as well as ensuring construction staff adhere to the drivers' code of conduct, in accordance with the TMP
- covering soil and aggregates that will be transported on public roads
- using water trucks for dust suppression as required along internal, unsealed access roads and disturbed areas, particularly during dry and windy conditions
- optimising and minimising vehicle movements onsite through the strategic location of laydown areas, site offices and parking areas and efficient logistics planning
- ensuring dust suppression measures take into consideration weather conditions (including wind strength and direction) and extended dry periods:
 - the weather on the project site will be monitored daily and communicated during pre-starts.

- during extended periods of dry and windy weather, the dust suppression measures defined in this section will be undertaken more frequently until the impacts on are quality are acceptably minimized.
- if current dust suppression methods are not effective, the SWMP and ESCP will be amended in collaboration with all contractors to further minimise sources of dust.

To minimise vehicle, plant and equipment emissions by the project, all contractors and their subcontractors will implement the following:

- inspecting and maintaining vehicles, plant and equipment to ensure they are operating efficiently, and in accordance with the manufacturer's requirements
- switching off vehicles, plant and equipment when not in use.

2.3.2 Visual Impact Management measures

In accordance with Condition 15 and 16 of Schedule 3, the NES site selection process and EIS process took into consideration sensitive receptors and the proximity of public roadways to mitigate visual impacts, including from glint and glare. In addition, the substation is located in a low point to minimise visual impacts.

ACEN Australia and its contractors will manage the visual impact of the project by:

- not mounting any advertising signs or logos on site, except where this is required for identification or safety purposes
- vegetating and/or rehabilitating disturbed land surfaces and stockpiles as soon as practicable as outlined in the SWMP and ESCP
- minimising light spillage from the development to road users, residential sensitive receivers and fauna species (mostly nocturnal species) by ensuring that any external lighting associated with the development:
 - is installed as low intensity lighting (except where required for safety or emergency purposes)
 - o does not shine above the horizontal plane
 - complies with AS/NZS 4282:2019 Control of Obtrusive Effects of Outdoor Lighting, and the Dark Sky Planning Guidelines (DPE 2018) or their latest versions
- removing temporary hoardings, barriers, traffic management and signage when no longer required
- keeping the site tidy and well maintained, including the secure storage and regular removal off-site of packaging materials (particularly cardboard and plastics)
- avoiding storage of materials beyond the construction site boundaries.

Infrastructure that will be installed as part of the project has been designed to reduce visual impact to sensitive receivers with the solar panels, and in particular, designed to absorb rather than reflect sunlight. While the impact to sensitive receivers is considered low (as reported in the EIS), measures to reduce residual visual impacts will include, as required:

- using non-reflective surfaces and paint colours that blend with the surrounding features of the site on ancillary infrastructure
- progressively rehabilitating areas of temporary disturbance as outlined in the BMP.

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3 Statutory Approvals

Statutory approvals include licences, permits, consents and/or authorisations that are required, pursuant to legislative obligations, prior to undertaking specific activities. Approvals relevant to NES are listed below in Table 3-1.

Table 3-1 Statutory approvals

Approval	Act	Comment
Section 4.38	Environmental Planning and Assessment Act 1979	Development Consent SSD 9255 was originally granted by DPE on 9 March 2020. Modifications to the Development Consent are described in Section 1.1 and the consolidated consent is provided in Appendix C.
Section 68 Approvals	Local Government Act 1993	ACEN Australia would require approvals under Section 68 of the Local Government Act 1993 to connect to Uralla Shire Council's water and sewerage networks. A Section 68 Certificate has been granted (S68-223-2022) associated with the O&M building and its septic system".
Construction and Occupation Certificates	Environmental Planning and Assessment Act 1979	 Construction Certificates are required prior to developing the NES. To date, the Principal Certifying Authority has issued the following construction certificates: CC1 – solar farm perimeter fences. CC2 – switchyard civil works. CC3 – substation civil works. CC4 – solar farm main works. CC5 – switchyard main works excluding buildings. CC6 – substation main works excluding buildings. CC7 – OHL works (outside switchyard). CC8 – switchyard, substation, and O&M facility and buildings. CC9 – switchyard permanent fence.
Section 99 Exemption during Total Fire Ban	Rural Fires Act 1997	If proposed, prior to conducting any Hot Works during a Total Fire Ban period, an exemption must be obtained from the Commissioner of the NSW Rural Fire Service. None have been required to date.
Section 45 Notice of Proposal	Electricity Supply Act 1995	Work carried out by a network operator and comprising the erection, installation, extension or alteration of electricity works on any land is exempt from the requirement for an approval under the <i>Local Government Act 1993</i> , except in relation to buildings. However, no

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		such work (other than routine repairs or maintenance work) may be carried out unless: notice of the proposal to carry out the work has been given to the local council, and Council has been given a reasonable opportunity (being not less than 40 days from the date on which the notice was given) to make submissions to the network operator in relation to the proposal, and the network operator has given due consideration to any submissions so made. None have been required to date.
Access Route	Heavy Vehicle (Adoption of National Law) Act 2013	All vehicles associated with the development must travel to and from the site via the New England Highway, Barleyfields Road (North), Big Ridge Road and the two site access points off Big Ridge Road, as identified in the figure in Appendix 4 of the SSD 9255 approval. Note: The Applicant is required to obtain relevant permits under the Heavy Vehicle National Law (NSW) for the use of over-dimensional vehicles on the road network. Several National Heavy Vehicle Regulator permits have been obtained to date.
Section 138 Certificate (Work on Public Lands) Section 34 Road Closure Permit	Roads Act 1993	Section 138 Certificate (Work on Public Lands) are required before road works are carried out. Relevant Section 138 Approvals were obtained prior to commencing the road upgrades. ACEN Australia has secured a Section 138 Approval for road closure within the site as well as a licence from Crown Roads to perform works for those roads that are in process of sale from Crown Lands to the relevant landowner.
Lease Agreements	Biosecurity Act 2015	Each of the Lease Agreements with the project landholders contains reference to the <i>Biosecurity Act 2015</i> and requires the solar farm operator to develop site-specific biosecurity measures to control biosecurity risk during the term of the lease.
Water Access Licence	Water Sharing Plan for the Macleay Unregulated and Alluvial Water Source 2016	No Water Access Licences are held by ACEN Australia or its Contractor under the <i>Water Sharing Plan for the Macleay Unregulated</i> <i>and Alluvial Water Source 2016</i> . Water is provided via a private commercial agreement with a landholder who has obtained Water Access Licences for extraction. Refer to the approved Water Supply Strategy for further details.
Water Access Licence	Water Sharing Plan for the North Coast Fractured and Porous Rock Groundwater Sources 2016	No Water Access Licences are required under the <i>Water Sharing Plan</i> for the North Coast Fractured and Porous Rock Groundwater Sources 2016. Water has not been obtained from this water source to date. Refer to the approved Water Supply Strategy for further details.

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Section 92 Water Supply Work Approval and Water Use Approval	Water Management Act 2000	Water is provided via a private commercial agreement with a landholder who has modified work approval number 30CA308873 to include a submersible pump and pipeline (to provide water to NES). Refer to the approved Water Supply Strategy for further details.
Section 6.27 Retirement of Biodiversity Credits	<i>Biodiversity Conservation Act 2016</i>	Biodiversity credits have been retired for NES. Refer to the approved Biodiversity Management Plan for further details.



4 Roles and Responsibilities

This section 4 of the EMS identifies the roles, responsibility, authority and accountability of all key personnel involved in the environmental management of NES.



Figure 4-3 NES staging overview (Green = Active Stages)

Table 4-1 summarises the roles and responsibilities of key parties, which are further detailed within Sections 4.1- 4.4 below.

Table 4-1 Roles and responsibilities of key personnel

Role	Responsibility	Accountable to
ACEN Australia Project Manager	Ensure NES is designed, built, operated, upgraded and decommissioned according to Development Consent SSD 9255.	ACEN Australia
Stage 2a Early Works Project Manager	Early Works contractor responsible for the design and build of the access road as part of the early works package.	ACEN Australia

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Stage 2a EPC Contractor Project Manager	EPC Contractor with the responsibility to design, procure, build and commission of NES Stage 2a (excluding the TG Switchyard & NES substation) for ACEN Australia.	ACEN Australia
Stage 2a Substation Project Manager	EPC Contractor with the responsibility to design, procure, build and commission the NES substation for ACEN Australia.	ACEN Australia
Stage 3a Switchyard Project Manager	EPC Contractor with the responsibility to design, procure, build and commission the TG Switchyard for ACEN Australia.	ACEN Australia
Stage 3a EPC Contractor Project Manager	EPC Contractor with the responsibility to design, procure, build and commission the Battery Energy Storage System for ACEN Australia.	ACEN Australia
ACEN Australia Community Liaison Officer	Recording and actioning of complaints during construction and operations. Each contractor is responsible for reporting and actioning complaints to ACEN Australia where relevant.	ACEN Australia Project Manager
Stage 1b Operations Manager (GLC)	Responsible for operating NES for the first two years after construction concludes. Will assume relevant responsibilities and accountability to operate NES in compliance with the existing Development Consent (refer to Appendix C). These responsibilities will be specified and incorporated into the OEMP prior to NES either being operated.	ACEN Australia
Contractors HSE Manager	Responsible to provide environmental training and ensure environmental compliance of the site in accordance with SSD 9255. This includes site inductions, preparing and delivering toolbox talks and maintaining appropriate registers and records.	ACEN Australia
ACEN HSE Manager	Responsible for auditing and monitoring each Contractors HSE Manager to ensure compliance of SSD 9255.	ACEN Australia
ACEN Australia	Responsible for the operating, upgrading and decommissioning NES after the first two years of operations. Will assume relevant responsibilities and accountability to either operate, upgrade or decommission NES in compliance with the existing Development Consent (refer to Appendix C). These responsibilities will be specified and incorporated into the OEMP and Decommissioning Management Plan prior to NES either being operating, upgraded or decommissioned.	ACEN Australia

4.1 Development Applicant

4.1.1 Ultimate Responsibility

ACEN Australia is the NES Applicant and as such has ultimate responsibility and accountability to ensure that NES is designed, built, operated, upgraded and decommissioned in accordance with the Development Consent.

ACEN Australia's Project Manager has full authority to ensure these obligations are met.

A copy of ACEN Australia's Environmental Policy is provided in Appendix A.

4.1.2 Website

ACEN Australia also has responsibility to provide up to date information on NES on its dedicated website (refer to Section 5 below):

https://newenglandsolar.com.au/

4.2 Stage 1b Operations Contractor (GLC)

For the first two years of operations, GLC will be the Operations Contractor (Stage 1b) and will have responsibilities to operate NES.

GLC will assume relevant responsibilities and accountability to operate NES in compliance with the existing Development Consent (refer to Appendix C). This responsibility extends to all employees and/or sub-contractors engaged by the contractors to operate NES.

GLC's Operations Project Manager will have full authority to ensure these obligations are met.

A copy of GLC's Environmental Policy is provided in Appendix B.

4.3 Stage 2a and Stage 3a Contractors

Each contractor for Stage 2 and 3 will have relevant responsibilities for designing, procuring, building and commissioning of each relevant scope of works for ACEN Australia as outlined in Table 4-1.

The construction Contractors' contractual obligations do not extend to the operation, upgrading or decommissioning of NES. The contractual requirements will, however, extend to the design and construction of NES in compliance with the Development Consent. This responsibility extends to all employees and/or sub-contractors engaged by the contractors to build NES.

The relevant Contractor's Project Managers will have full authority to ensure these obligations are met.

A copy of the Contractor's Environmental Policy will be provided in Appendix B once the relevant Contractor has been engaged by ACEN Australia.

4.4 Future Responsibilities

ACEN Australia will assume responsibilities to operate, upgrade and decommission NES after the first two years of Stage 1b operations having been completed.

ACEN Australia will be responsible and accountable to operate, upgrade or decommission NES in compliance with the existing Development Consent (refer to Appendix C).

These responsibilities will be specified and incorporated into the OEMP and Decommissioning Management Plan prior to these responsibilities being transferred from GLC to continue operations and prior to NES being upgraded or decommissioned.

It is envisioned a similar approach will be taken for Stage 2 and Stage 3 of works.

4.5 Training, awareness and competence

To ensure that this EMS is effectively implemented, each level of management is responsible for ensuring that all personnel reporting to them are aware of the requirements of this strategy. ACEN Australia's Health, Safety and Environment (HSE) Manager will coordinate the environmental training in conjunction with the Contractors HSE Managers and other training and development activities (e.g. safety).

4.5.1 Environmental induction

Prior to working on site all personnel and sub-contractors will undertake an online site-specific induction covering environmental aspects. This is done to ensure all personnel involved in the Project are aware of the requirements of the EMS, and to ensure the implementation of environmental management measures.

Short-term visitors to site for purposes such as deliveries will be required to be accompanied by inducted personnel at all times.

The HSE Manager for each contractor (or delegate) will conduct the environmental component of the site inductions. The environmental induction will address a range of issues including, but not limited to:

- Purpose and objectives of EMS.
- Requirements of due diligence and duty of care.
- Roles and responsibilities.
- Typical project environmental hazards and risks, including:
 - No go and exclusion zones
 - Location of sensitive environmental areas
 - Community sensitivities
- Environmental emergency and incident procedures and locations of emergency spill kits.
- Management and reporting process for environmental incidents.
- A record of all environment inductions will be maintained and kept on-site.

The HSE Manager for each contractor will review and approve the induction program and monitor implementation for its relevant scope of works. This will be reported to and facilitated by ACEN Australia's HSE Manager.

4.5.2 Toolbox talks, training and awareness

Toolbox talks will be one method used to raise awareness and educate personnel on issues related to environmental risks. Discussion of environmental issues will be a standard agenda item on all toolbox talks.

Environmental Management Strategy New England Solar From time to time, specific topics will be selected for a more detailed discussion in consultation with ACEN Australia's HSE Manager. Toolbox talks will be prepared and delivered by the Contractors HSE Manager (or delegate). A register of toolbox talks will be kept on site and maintained by the relevant Contractors HSE Managers and reported to ACEN Australia's HSE Manager.

Typical construction environmental topics discussed at toolbox talks include:

- Vegetation clearing and protection.
- Erosion and sedimentation management.
- Noise, vibration, and air quality management.
- Management of identified heritage items.
- Emergency procedures.

Typical operational environmental topics discussed at toolbox talks include:

- Vegetation protection and rehabilitation
- Erosion and sedimentation management
- Management of identified heritage items
- Emergency procedures.

4.5.3 Environmental awareness training

In addition to inductions and toolbox talks, select employees and sub-contractors may be provided with additional environmental awareness training. Formal qualifications for specialist staff may be required in relation to activities such as animal handling, weed spraying or chemical handling and the design of erosion and sedimentation control plans.

Targeted environmental awareness training will be provided to individuals or groups of workers with a specific authority or responsibility for environmental management or those undertaking an activity with a high risk of environmental impact.

This training may be delivered by external providers or by the Contractors HSE Manager. Daily pre-start meetings will occur during construction. The pre-start meeting is a tool for informing the workforce of the day's activities. Safe work practices, environmental protection practices, work area restrictions, activities that may affect the works, coordination with other trades, hazards and other information that may be relevant to the day's work are discussed.

Any potential non-compliance, notifiable incident or other matter which comes to light during the construction or operation of the Project would be advised to staff at the next pre-start meeting. This could include information which comes to light as a result of a community complaint.

The Site Managers or their delegates will conduct a daily pre-start meeting with the site workforce before the commencement of work each day (or shift) or where changes occur during a shift. Daily pre-start meetings are generally succinct and take approximately 10-15 minutes.

The environmental component of pre-starts will be determined by relevant foreman and environmental personnel and will include any environmental issues that could potentially be impacted by, or impact on, the day's activities. All attendees will be required to sign on to the pre-start and acknowledge their understanding of the issues explained.

5 Communication

5.1 Internal communication

Clear lines of communication through all levels and functions (e.g. management, staff and Contractors), is key to minimise environmental impacts and achieving continual improvements in environmental performance.

5.1.1 Daily onsite communication

During construction the HSE team will meet daily in preparation for the following day's pre-start to discuss any issues with environmental management onsite, any amendments to plans that may be required or any new/changes to construction activities.

5.1.2 Monthly environmental inspections

Monthly environmental inspections will be undertaken with the Contractors HSE team and relevant Project staff. The purpose of these inspections is to communicate internally ongoing environmental performance and to identify any issues to be addressed. Compliance Reports are kept on site and maintained by the Contractors HSE Manager and relevant Project Staff.

5.1.3 Monthly project review meetings

Monthly Project review meetings will be attended by ACEN Australia, the main Contractors on site and any other significant parties. The meetings will discuss the progress of the Project and will review significant environmental risks. Stakeholders and the broader community would be made aware of relevant project progress discussed at these meetings via the methods identified in Section 5.2 below, as relevant.

5.2 Access to Information

As the first point of call, ACEN Australia will keep the local community and relevant agencies informed about the operation and environmental performance of NES by providing up to date information on NES on its dedicated website:

https://newenglandsolar.com.au/.

Specifically, the following information will be made available on this project website:

- The EIS
- The final layout plans for the development (Schedule 4 Condition 5)
- Current statutory approvals for the development
- Approved strategies, plans or programs required under the conditions of this consent
- The proposed staging plans for the development if the construction, operation or decommissioning of the development is to be staged
- How complaints about the development can be made
- A complaints register

- Any independent environmental audit, and the Applicant's response to the recommendations in any audit
- Any other matter required by the Secretary

This information will also be kept up to date.

Table 5-1 below sets out further engagement options for various types of external stakeholders which will be utilised in order to keep the broader community informed.

Table 5-1 Engagement delivery method for each stakeholder group

Engagement Tools and Techniques	Requirements	Stakeholder Applicability ¹
Website	Provide plans and locations of the Project, Project milestones, high level work program with identified roads, community infrastructure to be affected. Provide contract details for information and feedback.	Tiers 1, 2 and 3
Facebook Page @newenglandsolar	Immediate forum to receive feedback, outline milestones, planned works.	Tiers 1, 2 and 3
Council Website	Provide information on road impacts, link to Project website, Project milestones. Advertise community events being supported. Community Sharing Benefit Initiative (CSBI) grants – opening dates and those awarded	Tiers 1, 2 and 3
Community Advisory Group	May include representatives from Uralla Shire Council, local business owners, Project and adjoining landholder. This Group may provide ACEN Australia and the Contractors with a means to communicate the timing of upcoming construction activities, provide local businesses with advance notice of resource needs and allow the businesses to plan for material needs variation in demand. It could also provide community representatives with a forum for voicing concerns.	Tier 1
Community Engagement Database Management	Identifies and records engagements with all stakeholders.	Tiers 1, 2 and 3

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ACEN Australia Email Address info@newenglandsolar.com.au	Continue to make available to receive feedback/ complaints.	Tiers 1, 2 and 3
Website Feedback	Continue to make available to receive feedback/ complaints.	Tiers 1, 2 and 3
Mailing list – email/mail	Provide regular updates via information sheet.	Tier 1
Complaints Register and management	Internal register to record and manage complaints received.	Tier 1
Phone calls/emails	As required, and proactively when new work areas will be commenced. A direct method that ACEN Australia and the Contractors can provide Project information and address outstanding issues from the previous meeting.	Tier 1
One on one consultation	One on one / face to face meetings can be used to address stakeholder specific matters/concerns about the Project.	Tier 1
Media Releases	To allow information to be easily and quickly transmitted to a wider audience. To increase interest and awareness in the Project.	Tiers 1, 2 and 3
Advertisements – local paper	Supporting community events and support, Project milestones.	Tier 2
Flyers and other Informative content, Project Newsletters	Milestones, scheduled work program, community supported events.	Tiers 1 and 2
CSBI Reference group	CSBI Reference group informed of Project milestones, encourages support through local representatives.	Tier 2
Site visits for interested groups e.g. councils, landholders, consultative committee. Special interest groups	Firsthand visibility of the Project development, progress.	Tiers 1 and 2
Participation in local events	Community support and development, community presence.	Tiers 1 and 2

¹ Tier 1 Stakeholders refers to project landholders, adjoining landholders, Uralla Shire Council, local businesses, Community Advisory Group, and Members of Parliament

Tier 2 Stakeholders refers to Armidale Regional Council, Walcha Shire Council, Tamworth Regional Council, Uralla Wordsworth, Armidale News, Armidale Express, Radio -Armidale- ABC New England North West, Armidale community radio 2ARM, Local television stations – Nine NBN (NBN News North West) ABC, Southern Cross 10, PRIME7 News North West, Clean Energy Council, NSW Renewable Energy Advocate, CSBI and CSBI Reference Group, Uralla Shire Business Chamber, Zero Net Energy Town (ZNet), Regional Development Australia Northern Inland (RDANI), Interested members of the local community (Uralla, Walcha, Armidale), Office of the Renewable Energy Regulator, Australian Energy Market Operator (AEMO), TransGrid, DPE, EPA, Transport for NSW, Northern Tablelands Local Land Services (LLS), NSW Fire and Rescue, NSW Rural Fire Service (RFS)

Tier 3 Stakeholders refers to local businesses potentially impacted as a partner or to deliver (e.g. hotels, accommodation, food outlets), Print/online media (SMH, Herald Sun, Australian), Radio, Television stations (captured by local media), Armidale Business Chamber, NSW Farmers Association, Residents and businesses of nearby towns e.g. Armidale, Walcha, University of New England (UNE), CSIRO, and Mining/mineral exploration license holders.

At significant timeframes in the Project's development, the following initiatives will be considered:

- Media releases should be prepared for each significant Project milestone
- Notices in local papers should be used for all roadwork information
- Site visits should be coordinated after significant Project milestones have been reached
- Letterbox drops, emails and phone calls should be undertaken prior to work commencing on the site, to the relevant landholders
- The website and complaints register should be updated monthly.

At regular intervals throughout the Project, a review of the following will be undertaken:

- Website Complaints Register, schedule of activities, contact numbers, email and postal addresses
- Complaints management procedure to be implemented as per the EMS
- Facebook, contact numbers, email addresses
- Mailing list for stakeholders
- Community Advisory Group function and members.



6 Complaints Management

6.1 Scope

This Section 6 describes the procedures that will be implemented to receive, handle, respond to and record complaints.

6.2 Means of Making a Complaint

The following contact details are available for the community to make a complaint or send an enquiry:

- A 24 hour telephone number (1800 844 889)
- An email address to which electronic complaints may be transmitted (info@newenglandsolar.com).
- A Facebook page has been established (<u>https://www.facebook.com/newenglandsolarfarm</u>).

These details are provided on the NES website. They would also be published in a local newspaper as part of project updates and are displayed on the project sign outside of the site which is in a publicly accessible location.

6.3 How any Complaint will be Handled

Any complaint received will be immediately logged in the NES Communications Document. The NES Communications Document captures complaints, as well as any community feedback or general enquiries. It is updated as required by ACEN Australia's Community Liaison Officer and is shared between key members of both ACEN Australia and the Contractors (for both construction and operations). By using the shared live document, it ensures that both ACEN Australia and the Contractors are aware of the status of any complaints and the most recent actions taken.

As soon as is practicable, ACEN Australia will investigate the cause of the complaint and identify actions required to avoid a recurrence. Regardless of the circumstance, this initial response will be completed within 24 hours of receiving the complaint.

If so requested when the complaint was received, ACEN Australia or the Contractor (where relevant) will also contact the complainant to discuss the issue, the cause and advise them of the actions taken to avoid a recurrence and any applicable timeframes to resolving the complaint.

This investigation and contact will be fully documented in the NES Communications Document maintained by ACEN Australia and the Complaints Register will be updated on an ongoing basis. Each month, the updated Complaints Register will be uploaded onto the Project website if a complaint was made within that month. The recording and actioning of complaints is the responsibility of ACEN Australia's Community Liaison Officer.

Should a complaint lead to the identification of a notifiable incident or other non-compliance, the notification measures outlined in Sections 8.4 and 9.3 would be followed, as relevant.
Any potential non-compliance, notifiable incident or other matter which comes to light during the construction of the Project would be advised to staff at the next pre-start meeting. This could include information which comes to light as a result of a community complaint.

6.4 Recording Complaints

Any and every complaint will be documented through maintaining the NES Communications Document and cross-referenced Complaints Register.

6.4.1 Complaints Register

The Complaints Register will record:

- A complaint reference number
- The date and time the complaint was received
- Whether the complainant wanted to be contacted
- Nature of the complaint
- Status of the resolution of the complaint.

For the life of the NES project the Complaints Register will be updated on a monthly basis (if complaints were received in that month) and listed on the NES website.

The public Complaints Register does not include details of who the complainant is on this register for privacy reasons.

6.4.2 **NES Communications Document**

The Communications Document will record:

- The date and time of the complaint
- The means by which the complaint was made (telephone, mail or email)
- Any personal details of the complainant that were provided, or if no details were provided a note to that effect
- The nature of the complaint
- Any actions taken in relation to the complaint, including timeframes for implementing the action
- If no action was undertaken in relation to the complaint, the reasons why no action was taken
- If the complainant wanted to be contacted, and if so, whether the action taken was considered acceptable to the complainant.

A copy of every record will be filed and held on-site and, on request, be provided to:

- DPE
- Environment Protection Authority (EPA)
- Uralla Shire Council

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• The complainant.

As the NES Communications Document will contain information on who made the complaint, it is not proposed to make this information publicly available on the NES website.

7 **Dispute Resolution**

7.1 Commitment

In the first instance, complaint investigations would be internally reviewed, and measures implemented to avoid recurrence of issues in the event of a dispute. Where disputes still cannot be resolved, ACEN Australia proposes the following:

- Advise both DPE and Uralla Shire Council that there is a dispute
- Provide both DPE and Uralla Shire Council with copies of the relevant complaint history, including relevant documentation in the form of Complaints Record(s)
- Engage a specialist with expertise relevant to the issue at hand to investigate the dispute and provide recommendations for resolution
- Advise the third party in dispute, DPE and Uralla Shire Council, in writing, as to when the dispute investigation will be completed
- Provide the third party, DPE and Uralla Shire Council a copy of the dispute investigation report, which will include the Contractors/ACEN Australia's intentions with regards to the implementation of the recommendations for resolution.

The timeframes for resolving disputes will vary depending on the nature of the dispute, whether further monitoring is required (e.g. in the case of noise or vibration complaints), whether disputes are influenced by seasonal and meteorological matters, the nature of input received from external regulators, and the possibility of legal action being taken.

ACEN Australia and its Contractor (where relevant) will also investigate the cause of the complaint and identify actions required to avoid a recurrence as soon as is practicable. Regardless of the circumstance, this initial response will be completed with 24 hours of receiving the complaint.

8 Non-Compliance

8.1 Commitment

A failure to comply with a Condition of Development Consent or statutory approval will constitute a non-compliance.

8.2 Response

In the event of a non-compliance, ACEN Australia and its contractor (where relevant) will undertake the five steps as outlined within Table 8-1 below, consistent with the guidance advice for ISO 14001 – Environmental management systems.

Table 8-1 Non-compliance Response

Step	Action	
React	 React to the non-compliance and, as applicable: 1. Act to control and correct it 2. Notify and communicate to relevant parties where required (as per Sections 8.4 and 9.3, as relevant. 3. Deal with the consequences, including mitigating adverse environmental impacts. 	
Evaluate	 Evaluate the need for action to eliminate the cause of the non-compliance in order that it does not recur or occur elsewhere by: 1. Reviewing the non-compliances 2. Determining the cause of the non-compliances 3. Determining if similar non-compliances exist or could potentially occur. 	
Act	Implement any action required.	
Review	Review the effectiveness of any corrective action taken.	
Change	Make changes to the environmental management plans, if necessary	

8.3 Corrective Action

Any non-compliance will trigger a Corrective Action appropriate to the significance of the effect of the non-compliance. ACEN Australia and its Contractor (where relevant) will retain documented information as evidence of the nature of the non-compliance and any subsequent actions taken, and the results of the Corrective Action.

8.4 Notification

Consistent with Condition 8-10 of Schedule 4 of the Development Consent, DPE will be notified in writing via the Major Projects website portal within seven days after ACEN Australia and its Contractor becomes aware of any non-compliance. A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

The notification will:

- Identify the development (i.e. as NES) and the application number (SSD 9255)
- Set out the Condition/s of Development Consent that the NES is non-compliant with
- The way in which it does not comply
- The reasons for non-compliance (if known)
- What actions have been done, or will be, undertaken to address the non-compliance.

DPE will also receive, written notification via the Major Projects website portal, of the date of commencement or cessation of any project phase, including construction, operations, upgrading, decommissioning or cessation of operations, consistent with Condition 4 of Schedule 4. Where any project phase is to be undertaken in stages, DPE will be given prior written notification identifying the development that would be carried out during the relevant stage.

DPE can also be contacted via the Major Projects Portal.

9 Incident Management

9.1 Material Harm

The Development Consent defines an incident as:

An occurrence or set of circumstances that causes or threatens to cause material harm.

The Development Consent defines material harm as harm that:

- involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial; or
- results in actual or potential loss of property damage of an amount, or amounts in aggregate, exceeding \$10,000 (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment).

This definition of 'material harm' is consistent with the definition in Section 147 of the *Protection of the Environment Operations Act 1997* and the associated legal obligations to notify the EPA where a 'pollution' incident occurs such that material harm to the environment is caused or threatened.

9.2 Immediate Response

Any incident that occurs that causes or threatens to cause material harm will be reported immediately to ACEN Australia's Project Manager (during construction and operations).

Upon receiving notification of an incident, ACEN Australia's Project Manager (or their nominee if off-site at the time of the incident) will immediately attend the incident and:

- Isolate the area affected by the incident
- Stop works around the area
- Implement containment measures to prevent the impact of the incident spreading
- Decide as to whether the incident has caused or threatens to cause material harm.

9.3 External Notifications

9.3.1 Duty to Report

If ACEN Australia's Project Manager (or their nominee if off-site at the time of the incident) has determined the incident has caused or threatens to cause material harm, he/she will, pursuant to requirements under Section 148 of the *Protection of the Environment Operations Act 1997* immediately notify the EPA, the NSW Ministry of Health, Fire and Rescue NSW and SafeWork NSW by verbal means.

These authorities will be notified (verbally) and provided the following relevant information:

- The time, date, nature, duration and location of the incident
- The location of the place where pollution is occurring or is likely to occur

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- The nature, the estimated quantity or volume and the concentration of any pollutants involved, if known
- The circumstances in which the incident occurred (including the cause of the incident, if known)
- The action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution, if known.

The EPA may direct ACEN Australia to notify such other persons of the incident as the EPA requires.

9.3.2 Notifications

All agencies including DPE, are to be notified immediately after becoming aware of an incident, ACEN Australia will immediately notify DPE in writing. Consistent with Condition 7 of Schedule 4 of the Development Consent, notification to DPE will be in writing via the Major Projects website portal, including the following information:

- Identify the development (i.e. the NES) and the application number (SSD 9255)
- Set out the location and nature of the incident.

Seven days after the incident, ACEN Australia will prepare a report as per Appendix 7 of the Development Consent.

10 Independent Audit

In accordance with Condition 11 of Schedule 4, GLC will commission an independent environmental audit of the development in accordance with the *Independent Audit Post Approval Requirements* (2020) within 3 months of commencing operations. The independent audit will be carried out in accordance with the specific requirements in the Independent Audit Post Approval Requirements (2020). Additionally, in accordance with the requirements the Independent Audit Post Approval Requirements (2020), the ACEN Australia Project Manager will:

- review and respond to each Independent Audit Report prepared under Condition 11 of Schedule 4 of the development consent, or Condition 11B of Schedule 4 of the development consent where notice is given by the Planning Secretary;
- submit the response to the Planning Secretary;
- make each Independent Audit Report, and ACEN's response to it, publicly available within 60 days of submission to the Planning Secretary, unless otherwise agreed by the Planning Secretary.

Independent Audit Reports and ACEN Australia's response to audit findings will be submitted to the Planning Secretary within two months of undertaking the independent audit site inspection as outlined in the Independent Audit Post Approvals Requirements (2020) unless otherwise agreed by the Planning Secretary.

GLC will manage the independent environmental auditing process, make documents and site personnel available as required and implement the recommendations of the audits.

Proposed independent auditors will be agreed to in writing by the Planning Secretary prior to the commencement of an Independent Audit.

It is noted that the Planning Secretary may require the initial and subsequent Independent Audits to be undertaken at different times to those specified in Condition 11 of Schedule 4 upon giving at least 4 weeks' notice to ACEN Australia of the date upon which the audit will be commenced. Table 6.2 summarises the external audit program.

Timing	Туре	Objective	Status
Within three months start of construction	Independent Environmental Audit	Establish that all management controls are being implemented, and compliance with environmental performance objectives are being achieved	Complete.
Within three months start of operations	Independent Environmental Audit	Establish that all management controls are being implemented, and compliance with environmental performance objectives are being achieved	Triggered when plant confirmed as Operational
Subsequent audits as requested by the Planning Secretary		Establish that all management controls are being implemented, and compliance with environmental performance objectives are being achieved. Ensure any prior non-compliances have been addressed	As required.

Table 10.2 External audit program

11 Emergency Response

The Development Consent requires that an Emergency Response Plan and Fire Safety Study be prepared in consultation with the Rural Fire Service (RFS) and Fire and Rescue NSW (FRNSW). A Fire and Emergency Response Plan (FERP) has been prepared in consultation with RFS and FRNSW to satisfy the requirements of the Emergency Response Plan. A revised version of the FERP, including the Fire Safety Study, will be approved by the Secretary prior to commencing construction of the battery energy storage system.

Table 11-1 below provides a guide to the FERP, indicating which specific Emergency Response Procedure (ERP) should be followed in the event of various specific hazards and risks eventuating during the Project.

ERP	Section	ERP Number
Building/structure collapse	Section 5.1 of the FERP	ERP 1
Bushfire/grassfire	Section 5.2 of the FERP	ERP 2
Earthquake	Section 5.3 of the FERP	ERP 3
Electrocution	Section 5.4 of the FERP	ERP 4
Explosion	Section 5.5 of the FERP	ERP 5
Extreme temperature/heatwave	Section 5.6 of the FERP	ERP 6
Fire - industrial	Section 5.7 of the FERP	ERP 7
Fire - building	Section 5.8 of the FERP	ERP 8
Fire - smoke	Section 5.9 of the FERP	ERP 9
Flood	Section 5.10 of the FERP	ERP 10
Hazardous substance spill	Section 5.11 of the FERP	ERP 11
LPG leak/Boiling Liquid Expanding Vapour Explosion event	Section 5.12 of the FERP	ERP 12
Personal injury/medical emergency	Section 5.13 of the FERP	ERP 13
Powerline down or vehicle contact	Section 5.14 of the FERP	ERP 14

Table 11-1 List of emergency response procedures developed for NES within the Fire and Emergency Response Plan



Renewable Energy from ACEN

Severe storm event/lightning	Section 5.15 of the FERP	ERP 15
Site evacuation	Section 5.16 of the FERP	ERP 16
Snake bite	Section 5.17 of the FERP	ERP 17
Trench/excavation collapse	Section 5.18 of the FERP	ERP 18
Vehicle incident	Section 5.19 of the FERP	ERP 19



11 Environmental Monitoring

Condition 1 of Schedule 4, requires that the Environmental Management strategy must:

e) include:

• a clear plan depicting all the monitoring to be carried out in relation to the development.

Environmental monitoring conducted as part of the development is included in Appendix E. Environmental monitoring will vary between construction and operations. The latest version of the environmental monitoring schedules are maintained on the NES website. Further detail of each monitoring requirement is provided in the relevant environmental strategies, plans and programs and will be reviewed prior to the commencement of construction for Stage 2a and 3a.

The objective of the monitoring is to validate the impacts predicted for NES, to measure the effectiveness of environmental controls and implementation of this EMS, and to address specific requirements.

ACEN Australia and its Contractor will respond in a timely manner to any requests in relation to monitoring or effectiveness of environmental controls and their implementation raised by NSW Government Agencies.

Should monitoring lead to the identification of a notifiable incident or other non-compliance, the notification measures outlined in Sections 8.4 and 9.3 would be followed, as relevant. Should monitoring be in response to a received complaint, the complaint response measures outlined in Section 6 would be followed.

12 References

EMM Consulting (2019a) New England Solar Farm – Environmental Impact Statement. February 2019.
EMM Consulting (2019b) New England Solar Farm – Amendment Report. June 2019.
EMM Consulting (2019c) New England Solar Farm – Submissions Report. June 2019.
EMM Consulting (2019d) New England Solar Farm – Additional Information. October 2019.
EMM Consulting (2019e) New England Solar Farm – Additional Information. December 2019.
UPC Renewables (2020a) New England Solar Farm (SSD 9255) – IPC Responses. 7 February 2020.
UPC Renewables (2020b) New England Solar Farm – Modification report for the modification to development consent (Modification 1). December 2020.
EMM Consulting (2022) New England Solar and Battery Project – Modification to development consent SSD 9255 (Modification 2). December 2022
EMM Consulting (2023a) New England Solar and Battery Project – Submissions Report. January 2023

EMM Consulting (2023b) New England Solar and Battery Project – Amendment Report. January 2023

ACEN Australia (2023) New England Solar and Battery Project – Additional Information. April 2023



APPENDIX A ACEN AUSTRALIA ENVIRONMENTAL POLICY

ACEN | Australia

ENVIRONMENTAL POLICY

ACEN Australia is committed to undertaking our business in an environmentally sensitive and forward thinking manner. To achieve this, we will:

- Comply with environmental laws and regulations in all work locations as an absolute minimum;
- Understand and manage potential environmental risks at all work locations;
- Contribute to the overall health and resiliency of ecosystems in all work locations;
- Participate in integrated approaches to land use planning;
- Identify and implement opportunities for efficient energy and water usage;
- Identify and implement opportunities for waste avoidance and minimisation;
- Report annually to all stakeholders on our environmental activities.

David Pollington Chief Executive Officer ACEN Australia August 2023



APPENDIX B CONTRACTORS ENVIRONMENTAL POLICY



INTEGRATED MANAGEMENT SYSTEM ENVIRONMENTAL POLICY

Page 1 of 1

POLICY STATEMENT

Green Light Contractors (GLC) undertakes a reflective, resourceful, inclusive and flexible approach to environmental management, underpinned by a robust ISO 14001 certified integrated management system. We commit to:

LEAD

- Having visible and demonstrated environmental leadership throughout the business to equip, inspire, empower and lead our people to win and deliver environmentally sound projects.
- Ensuring strong and positive leadership engagement with tender and project delivery teams at all levels to understand and resolve the environmental challenges they face.
- Establishing measurable objectives and targets to quantify our environmental performance, committing to and demonstrating continual improvement.

GROW

- Promoting innovative thinking and practices to achieve positive environmental outcomes.
- Understanding our customers, business partners and subcontractors' environmental capabilities and priorities and working together to develop common strategies to achieve shared goals.

DELIVER

- Identifying and communicating non-conformities, lessons learnt and corrective actions arising from environmental incidents to enhance environmental performance.
- Complying with applicable environmental legislation, regulations, codes of practice, customer and project specific requirements.
- Provision of the necessary resources and management support to achieve environmental goals.

SUSTAIN

- Equipping all employees with the knowledge, skills and resources to achieve our environmental goals. Engaging with employees, subcontractors, customers, and other key stakeholders on environmental issues.
- Monitoring our environmental performance and identifying initiatives that lead to improved environmental outcomes.

PROTECT

- Developing and implementing methods to protect the environment, prevent pollution and eliminate or minimise significant environmental impacts.
- Ensuring the efficient use of resources including energy, water and materials, and providing responsible waste management.

		4 ×	· · · ·	
00	02/07/2019	Mark Donelly	P. Fernandez	P. Fernandez
REVISION	DATE	PREPARED	CHECKED	APPROVED



APPENDIX C CONDITION OF CONSENT SSD 9255

Development Consent

Section 4.38 of the Environmental Planning & Assessment Act 1979

The Independent Planning Commission of NSW approves consent to the development application referred to in Schedule 1, subject to the conditions in Schedules 2 to 4.

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.

Andrew Hutton (Chair)	Professor Zada Lipman	Professor Snow Barlow
Member of the Commission	Member of the Commission	Member of the Commission

Sydney

9 March 2020

The Department has prepared a consolidated version of the consent which is intended to include all modifications to the original determination instrument.

The consolidated version of the consent has been prepared by the Department with all due care. This consolidated version is intended to aid the consent holder by combining all consents relating to the original determination instrument but it does not relieve a consent holder of its obligation to be aware of and fully comply with all consent obligations as they are set out in the legal instruments, including the original determination instrument and all subsequent modification instruments.

CONSOLIDATED CONSENT

SCHEDULE 1

Application Number: Applicant: Consent Authority: Land: Development: SSD 9255 ACEN Australia Pty Ltd Independent Planning Commission See Appendix 2 New England Solar Farm

CONSOLIDATED CONSENT

SUMMARY OF MODIFICATIONS

Application Number	Determination Date	Decider	Modification Description
SSD-9255-Mod-1	19/02/2021	Director	Revised road upgrade disturbance boundaries
SSD-9255-Mod-2	26/05/2023	Director	Increase capacity of the Battery Storage and increased development footprint

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DEFINITIONS

Aboriginal stakeholders registered for cultural heritage consultation for the

Ancillary infrastructure	All project infrastructure with the exception of solar panels, including but not limited to collector substations, switching stations, permanent offices, battery
Applicant	storage and site compounds, electricity transmission lines and internal roads ACEN Australia Pty Ltd, or any person who seeks to carry out the development
	approved under this consent
Battery storage	Large scale energy storage system
BCD	Biodiversity Conservation Division within the Department
Cessation of operations Conditions of this consent	Operation of the development has ceased for a continuous period of 12 months Conditions contained in Schedules 1 to 4 inclusive
Construction	The construction of the development, including but not limited to the carrying out
Construction	of any earthworks on site and the construction of solar panels and any ancillary infrastructure (but excludes road upgrades or maintenance works to the public
	road network, building/road dilapidation surveys, installation of fencing, artefact
	survey and/or salvage, overhead line safety marking and geotechnical drilling
	and/or surveying)
Council	Uralla Shire Council
Decommissioning	The removal of solar panels and ancillary infrastructure and/or rehabilitation of the site
Department	Department of Planning and Environment
Development	The development as described in the EIS
Development footprint	The area within the site on which the components of the project will be constructed (shown in Appendix 1)
DPIE Water	Water Group within the Department
EIS	The Environmental Impact Statement for New England Solar Farm dated
	February 2019, the Amendment Report dated June 2019, the Response to
	Submissions dated June 2019, additional information dated 31 October 2019
	and 10 December 2019, the subdivision plan (see Appendix 3) and the additional information provided to the Independent Planning Commission of NSW on 7
	February 2020 and 18 February 2020, as modified by:
	 New England Solar Farm Modification Application – Modification Report
	dated 16 December 2020.
	New England Solar and Battery Project – Modification to development
	consent SSD-9255 dated 10 October 2022 (Modification Report).
	New England Solar and Battery Project – Submissions Report dated 18
	January 2023.
	New England Solar and Battery Project - Amendment Report dated 20 January 2023.
	 New England Solar and Battery Project – Additional Information dated 20
	April 2023.
EP&A Act	Environmental Planning and Assessment Act 1979
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPA Feasible	Environment Protection Authority Feasible relates to engineering considerations and what is practical to build or
reasible	implement
FRNSW	Fire and Rescue NSW
Heavy vehicle	A vehicle that has a combined Gross Vehicle Mass or Aggregate Trailer Mass
	of more than 4.5 tonnes
Heritage item	An item as defined under the <i>Heritage Act</i> 1977 and/or an Aboriginal Object or Aboriginal Place as defined under the <i>National Parks and Wildlife Act</i> 1974
Heritage NSW	Heritage NSW within the Department of Premier and Cabinet
Incident	A set of circumstances that causes or threatens to cause material harm to the
	environment
Material harm	Is harm that:
	 involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial; or
	 results in actual or potential loss or property damage of an amount, or
	amounts in aggregate, exceeding \$10,000 (such loss includes the
	reasonable costs and expenses that would be incurred in taking all
	reasonable and practicable measures to prevent, mitigate or make good
Minister	harm to the environment
Minister Minimise	Minister for Planning, or delegate Implement all reasonable and feasible mitigation measures to reduce the
	implement all reasonable and reasible mitigation measures to reduce the impacts of the development
NSW Government	5

Aboriginal stakeholders

Modification 2	New England Solar and Battery Project Modification Report dated 10 October 2022, New England Solar and Battery Project Submissions Report dated 18 January 2023, New England Solar and Battery Project Amendment Report dated 20 January 2023 and New England Solar and Battery Project – Additional Information dated 20 April 2023
Non-compliance	An occurrence, set of circumstances or development that is a breach of this consent but is not an incident
Operation	The operation of the development, but does not include commissioning, trials of equipment or the use of temporary facilities
Over-dimensional vehicle	Over-mass and/or over-size/length vehicles
Public infrastructure	Linear and related infrastructure that provides services to the general public, such as roads, railways, water supply, drainage, sewerage, gas supply, electricity, telephone, telecommunications, irrigation channels, drainage channels
Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
Rehabilitation	The restoration of land disturbed by the development to a good condition, to ensure it is safe, stable and non-polluting
RFS	Rural Fire Service
Secretary	Secretary of the Department, or nominee
Site	As shown in Appendix 1 and listed in Appendix 2
Temporary facilities	Temporary facilities used for the construction, upgrading and/or decommissioning of the development, including but not limited to temporary site offices and compounds, materials storage compounds, maintenance workshops, material stockpiles, laydown areas and parking spaces
TfNSW	Transport for NSW
Upgrading	The augmentation and/or replacement of solar panels and ancillary infrastructure on site (excluding maintenance)
Vehicle movement	One vehicle entering and leaving the site

SCHEDULE 2 ADMINISTRATIVE CONDITIONS

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

1. In meeting the specific environmental performance criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation, upgrading or decommissioning of the development.

TERMS OF CONSENT

- 2. The Applicant must carry out the development:
 - (a) generally in accordance with the EIS; and
 - (b) in accordance with the conditions of this consent.

Note: The general layout of the development is shown in Appendix 1.

- 3. If there is any inconsistency between the above documents, the most recent document must prevail to the extent of the inconsistency. However, the conditions of this consent must prevail to the extent of any inconsistency.
- 4. The Applicant must comply with any requirement/s of the Secretary arising from the Department's assessment of:
 - (a) any strategies, plans or correspondence that are submitted in accordance with this consent;
 - (b) any reports, reviews or audits commissioned by the Department regarding compliance with this consent; and
 - (c) the implementation of any actions or measures contained in these documents.

UPGRADING OF SOLAR PANELS AND ANCILLARY INFRASTRUCTURE

5. Over time, the Applicant may upgrade the solar panels and ancillary infrastructure on site provided these upgrades remain within the approved development footprint of the site. Prior to carrying out any such upgrades, the Applicant must provide revised layout plans and project details of the development to the Secretary incorporating the proposed upgrades.

STRUCTURAL ADEQUACY

6. The Applicant must 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 *Building Code of Australia.*

Notes:

- Under Part 6 of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the development.
- Part 8 of the EP&A Regulation sets out the requirements for the certification of the development.

DEMOLITION

7. The Applicant must ensure that all demolition work on site is carried out in accordance with Australian Standard AS 2601-2001: The Demolition of Structures, or its latest version.

PROTECTION OF PUBLIC INFRASTRUCTURE

- 8. Unless the Applicant and the applicable authority agree otherwise, the Applicant must:
 - (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and
 - (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.

This condition does not apply to the upgrade and maintenance of the road network, which is expressly provided for in the conditions of this consent.

OPERATION OF PLANT AND EQUIPMENT

- 9. The Applicant must ensure that all plant and equipment used on site, or in connection with the development, is:
 - (a) maintained in a proper and efficient condition; and
 - (b) operated in a proper and efficient manner.

SUBDIVISION PLAN

10. The Applicant may subdivide the site to create new allotments for the proposed substation, in accordance with the layout approved in Schedule 4 - Condition 5, and with the requirements of the EP&A Act and EP&A Regulation, and generally in accordance with the figure in Appendix 3.

Prior to subdividing the site, the Applicant must prepare and submit detailed subdivision plans to the Secretary for approval.

Notes:

- Under Part 6 of the EP&A Act, the Applicant is required to obtain a subdivision certificate for a plan of subdivision.
- Division 4 of Part 8 of the EP&A Regulation sets out the application requirements for subdivision certificates

BATTERY STORAGE RESTRICTION

11. Any building or fire rated compartment containing lithium-ion batteries shall contain less than or equal to 30 megawatt hours (MWh) of energy storage capacity.

SCHEDULE 3 ENVIRONMENTAL CONDITIONS – GENERAL

TRANSPORT

(a)

Over-Dimensional and Heavy Vehicle Restrictions

- 1. The Applicant must ensure that the:
 - development does not generate more than:
 - 84 heavy vehicle movements a day during construction, upgrading and decommissioning;
 - 30 over-dimensional vehicle movements during construction, upgrading and decommissioning; and
 - 5 heavy vehicle movements a day during operations;
 - on the public road network;
 - (b) length of any vehicles (excluding over-dimensional vehicles) used for the development does not exceed 26 metres,

unless the Secretary agrees otherwise.

2. The Applicant must keep accurate records of the number of over-dimensional and heavy vehicles entering or leaving the site each day for the duration of the project.

Access Route

3. All vehicles associated with the development must travel to and from the site via the New England Highway, Barleyfields Road, Big Ridge Road and the two site access points off Big Ridge Road, as identified in the figure in Appendix 4.

Note: The Applicant is required to obtain relevant permits under the Heavy Vehicle National Law (NSW) for the use of over-dimensional vehicles on the road network.

Road Upgrades and Site Access

Prior to commencing construction, the Applicant must implement the road upgrades identified in Appendix
 These upgrades must be carried out to the satisfaction of the relevant roads authority, unless the Secretary agrees otherwise.

Operating Conditions

- 5. The Applicant must ensure:
 - (a) the internal roads are constructed as all-weather roads;
 - (b) there is sufficient parking on site for all vehicles, and no parking occurs on the public road network in the vicinity of the site;
 - (c) the capacity of the existing roadside drainage network is not reduced;
 - (d) all vehicles are loaded and unloaded on site, and enter and leave the site in a forward direction;
 - (e) development-related vehicles leaving the site are in a clean condition to minimise dirt being tracked onto the sealed public road network; and
 - (f) segments 4 and 5 of Big Ridge Road, identified in the figure in Appendix 4, are maintained to the standard identified in Appendix 4 at the cost of the Applicant for the life of the development, unless the Secretary agrees otherwise.

Traffic Management Plan

- Prior to commencing the development, the Applicant must prepare a Traffic Management Plan for the development in consultation with TfNSW and Council, and to the satisfaction of the Secretary. This plan must include:
 - (a) details of the transport route to be used for all development-related traffic;
 - (b) a protocol for undertaking independent dilapidation surveys to assess the:
 - existing condition of Barleyfields Road and Big Ridge Road on the access route, prior to construction, upgrading or decommissioning activities; and
 - condition of Barleyfields Road and Big Ridge Road on the access route, following construction, upgrading or decommissioning activities;
 - a protocol for the repair of Barleyfields Road and Big Ridge Road on the access route, if dilapidation surveys identify these roads to be damaged during construction, upgrading or decommissioning works;
 - (d) details of the road works required by condition 4 of Schedule 3 to this consent;

- (e) a protocol for the maintenance of segments 4 and 5 of Big Ridge Road required by condition 5(f) of Schedule 3 to this consent;
- (f) details of the measures that would be implemented to minimise traffic impacts during construction, upgrading or decommissioning works, including:
 - temporary traffic controls, including detours and signage;
 - notifying the local community about project-related traffic impacts;
 - procedures for receiving and addressing complaints from the community about developmentrelated traffic;
 - minimising potential for conflict with school buses, other motorists, road users and rail services as far as practicable;
 - implement measures to minimise dirt tracked onto the public road network from developmentrelated traffic;
 - details of the employee shuttle bus service and measures to encourage employee use of this service;
 - scheduling of haulage vehicle movements to minimise convoy length or platoons;
 - responding to local climate conditions that may affect road safety such as fog, dust, wet weather and flooding;
 - responding to any emergency repair or maintenance requirements; and
 - a traffic management system for managing over-dimensional vehicles;
 - a driver's code of conduct that addresses:
 - travelling speeds;
 - driver fatigue;
 - · procedures to ensure that drivers adhere to the designated transport routes; and
 - procedures to ensure that drivers implement safe driving practices, including consideration of other road users; and
- (h) a program to ensure drivers working on the development receive suitable training on the code of conduct and any other relevant obligations under the Traffic Management Plan.

Following the Secretary's approval, the Applicant must implement the Traffic Management Plan.

LANDSCAPING

(g)

7. Within 3 years of commencement of construction, the owner of N1 may request in writing that the Applicant to plant a vegetation screen to minimise the visual impacts of the northern array on the N1 property.

Upon receiving such a written request from the owner of N1, the Applicant must implement reasonable and feasible landscape screening in consultation with the owner making the request.

The vegetation screen must:

- (a) be wholly contained within the site;
- (b) consist of native species that facilitate the screening of the view of the solar panels and ancillary infrastructure from within the N1 property;
- (c) be implemented within 12 months of receiving the written request, unless the Secretary agrees otherwise; and
- (d) be properly maintained with appropriate weed management.

If the Applicant and owner of N1 cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.

LAND MANAGEMENT

- 8. Following any construction or upgrading on the site, the Applicant must:
 - (a) restore the ground cover of the site as soon as practicable;
 - (b) maintain the ground cover with appropriate perennial species; and
 - (c) manage weeds within this ground cover; and
 - (d) manage feral pest species.

BIODIVERSITY

Vegetation Clearance

9. The Applicant must not clear any native vegetation or fauna habitat located outside the approved disturbance footprint described in the EIS.

Biodiversity Offsets

10. Prior to commencing the development under this consent, the Applicant must retire biodiversity credits of a number and class specified in Table 1 and Table 2 below, to the satisfaction of BCD, unless the Secretary agrees otherwise.

The retirement of these credits must be carried out in accordance with the NSW Biodiversity Offsets Scheme and can be achieved by:

- (a) acquiring or retiring 'biodiversity credits' within the meaning of the *Biodiversity Conservation Act* 2016;
- (b) making payments into an offset fund that has been developed by the NSW Government; or
- (c) funding a biodiversity conservation action that benefits the entity impacted and is listed in the ancillary rules of the biodiversity offset scheme.

Table 1: Ecosystem Credit Requirements

Vegetation Community	PCT ID	Credits Required
Blakely's Red Gum – Yellow Box grassy woodland of the New England Tableland Bioregion	510	107
Silvertop Stringybark open forest of the New England Tableland Bioregion	1174	78
Broad-leaved Stringybark - Yellow Box shrub/grass open forest of the New England Tableland Bioregion	567	18

Table 2: Species Credit Requirements

Vegetation Community	Credits Required
Bluegrass (Dichanthium setosum)	44
Hawkweed (Picris evae)	43
Austral Toadflax (Thesium australe)	33
Pale-headed Snake (Hoplocephalus bitorquatus)	39
Glossy Black-Cockatoo (Calyptorhynchus lathami)	30
Squirrel Glider (Petaurus norfolcensis)	39
Koala (Phascolarctos cinereus)	39
Barking Owl (Ninox connivens)	5

10A. Prior to carrying out works associated with Modification 2 that could directly or indirectly impact the biodiversity values requiring offset, the applicant must retire biodiversity credits of a number and class specified in Table 3 below, unless the Planning Secretary agrees otherwise.

The retirement of credits must be carried out in accordance with the *NSW Biodiversity Offsets Scheme* and can be achieved by:

- (a) acquiring or retiring 'biodiversity credits' within the meaning of the *Biodiversity Conservation Act* 2016;
- (b) making payments into an offset fund that has been developed by the NSW Government; or
- (c) funding a biodiversity conservation action that benefits the entity impacted and is listed in the ancillary rules of the biodiversity offset scheme.

Table 3: Ecosystem Credit Requirements for Modification 2

Vegetation Community	PCT ID	Credits Required
Blakely's Red Gum – Yellow Box grassy woodland of the New England Tableland Bioregion	510	7

Biodiversity Management Plan

- 11. Prior to commencing the development, the Applicant must prepare a Biodiversity Management Plan for the development in consultation with BCD, and to the satisfaction of the Secretary. This plan must:
 - (a) include a description of the measures that would be implemented for:
 - protecting vegetation and fauna habitat outside the approved disturbance areas;
 - managing the remnant vegetation and fauna habitat on site;

- minimising clearing and avoiding unnecessary disturbance of vegetation that is associated with the construction and operation of the development;
- minimising the impacts to fauna on site and implementing fauna management protocols;
- avoiding the removal of hollow-bearing trees during spring to avoid the main breeding period for hollow-dependent fauna;
- rehabilitating and revegetating temporary disturbance areas with species that are endemic to the area;
- maximising the salvage of vegetative and soil resources within the approved disturbance area for beneficial reuse in the enhancement or the rehabilitation of the site; and
- controlling weeds and feral pests; and
- (b) include details of who would be responsible for monitoring, reviewing and implementing the plan, and timeframes for completion of actions.

Following the Secretary's approval, the Applicant must implement the Biodiversity Management Plan.

Note: If the biodiversity credits are retired via a Biodiversity Stewardship Agreement, then the Biodiversity Management Plan does not need to include any of the matters that are covered under the Biodiversity Stewardship Agreement.

AMENITY

Construction, Upgrading and Decommissioning Hours

- 12. Unless the Secretary agrees otherwise, the Applicant may only undertake construction, upgrading or decommissioning activities on site between:
 - (a) 7 am to 6 pm Monday to Friday;
 - (b) 8 am to 1 pm Saturdays; and
 - (c) at no time on Sundays and NSW public holidays.

The following construction, upgrading or decommissioning activities may be undertaken outside these hours without the approval of the Secretary:

- the delivery of materials as requested by the NSW Police Force or other authorities for safety reasons; or
- · emergency work to avoid the loss of life, property and/or material harm to the environment.

Noise

13. The Applicant must minimise the noise generated by any construction, upgrading or decommissioning activities on site in accordance with the best practice requirements outlined in the *Interim Construction Noise Guideline* (DECC, 2009), or its latest version.

Dust

14. The Applicant must ensure all operations and activities occurring at the Project site are carried out in a manner that minimises dust including the emission of wind-blown or traffic generated dust.

Visual

- 15. The Applicant must:
 - (a) minimise the off-site visual impacts of the development, including the potential for any glare or reflection;
 - (b) ensure the visual appearance of all ancillary infrastructure (including paint colours) blends in with the surrounding landscape, where reasonable and feasible; and
 - (c) not mount any advertising signs or logos on site, except where this is required for identification or safety purposes.

Lighting

- 16. The Applicant must:
 - (a) minimise the off-site lighting impacts of the development; and
 - (b) ensure that any external lighting associated with the development:
 - is installed as low intensity lighting (except where required for safety or emergency purposes);
 - does not shine above the horizontal; and
 - complies with Australian/New Zealand Standard AS/NZS 4282:2019 Control of Obtrusive Effects of Outdoor Lighting, or its latest version.

HERITAGE

17. Prior to the commencing the development, the Applicant must undertake consultation with Aboriginal stakeholders, in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW, 2010), or its latest version.

Protection of Heritage Items

18. The Applicant must ensure the development does not cause any direct or indirect impacts on the Aboriginal heritage items identified in Table 1 of Appendix 5 or the historic heritage items identified in Table 1 of Appendix 6, or any Aboriginal or historic heritage items located outside the approved development footprint.

Prior to carrying out any development that could directly or indirectly impact the heritage items identified in Table 2 of Appendix 5, the Applicant must salvage and relocate the item/s that would be impacted to a suitable alternative location, in accordance with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (DECCW, 2010), or its latest version.

Note: The location of the Aboriginal heritage and historic heritage items referred to in this condition are shown in the figures in Appendix 5 and Appendix 6, respectively.

Heritage Management Plan

- 19. Prior to commencing the development, the Applicant must prepare a Heritage Management Plan for the development to the satisfaction of the Secretary. This plan must:
 - (a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;
 - (b) be prepared in consultation with Heritage NSW, Aboriginal Stakeholders and Council;
 - (c) include a description of the measures that would be implemented for:
 - protecting the Aboriginal heritage items identified in Table 1 of Appendix 5 or items located outside the approved development footprint, including fencing off Aboriginal heritage items prior to commencing construction and providing ongoing access and management opportunities for Aboriginal people to NE09 and NE68;
 - salvaging and relocating the Aboriginal heritage items located within the approved development footprint, as identified in Table 2 of Appendix 5;
 - protecting the historic heritage items identified in Table 1 of Appendix 6 or items located outside the approved development footprint;
 - managing the impact of the development on the historic heritage items identified in Table 2 of Appendix 6, including photographic archival records prepared in accordance with Heritage Council of NSW Guidelines for archival recordings;
 - a contingency plan and reporting procedure if:
 - previously unidentified heritage items are found; or
 - Aboriginal skeletal material is discovered;
 - ensuring workers on site receive suitable heritage inductions prior to carrying out any development on site, and that records are kept of these inductions; and
 - ongoing consultation with Aboriginal stakeholders during the implementation of the plan;
 - (d) include a program to monitor and report on the effectiveness of these measures and any heritage impacts of the project.

Following the Secretary's approval, the Applicant must implement the Heritage Management Plan.

SOIL AND WATER

Water Supply

20. Prior to the commencement of the development the Applicant must demonstrate to the satisfaction of the Secretary that the Applicant has sufficient water for all stages of the development, and if necessary, adjust the scale of the development to match its available water supply.

Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain the necessary water licences for the development.

Water Pollution

21. The Applicant must ensure that the development does not cause any water pollution, as defined under Section 120 of the POEO Act.

Operating Conditions

- 22. The Applicant must:
 - (a) minimise the siting of solar panels and ancillary infrastructure (including security fencing) within watercourses within the approved development footprint;
 - (b) ensure the solar panels and ancillary infrastructure (including security fencing) are designed, constructed and maintained to reduce impacts on surface water, flooding and groundwater at the site;
 - (c) minimise any soil erosion associated with the construction, upgrading or decommissioning of the development in accordance with the relevant requirements in the *Managing Urban Stormwater: Soils and Construction* (Landcom, 2004) manual, or its latest version;
 - (d) ensure the solar panels and ancillary infrastructure are designed, constructed and maintained to avoid causing any erosion on site; and
 - (e) ensure all works are undertaken in accordance with the following, unless otherwise agreed by DPIE Water:
 - Guidelines for Controlled Activities on Waterfront Land (NRAR, 2018), or its latest version; and
 - Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (2004), or its latest version.

HAZARDS

Fire Safety Study

- 23. Prior to commencing construction of the battery storage facility, unless the Secretary agrees otherwise, the Applicant must prepare a Fire Safety Study for the development, in consultation with FRNSW and RFS and to the satisfaction of FRNSW and the Secretary. The study must:
 - (a) be consistent with the:
 - Department's Hazardous Industry Planning Advisory Paper No. 2 'Fire Safety Study' guideline; and
 - NSW Government's Best Practice Guidelines for Contaminated Water Retention and Treatment Systems;
 - (b) describe the final design of the battery storage facility;
 - (c) for the option of a purpose-built Battery Storage building, report the controls adopted and demonstrate consistency with the hazard controls described in the Preliminary Hazard Analysis (Sherpa, 21 August 2022) and New England Solar and Battery Project – Submissions Report dated 18 January 2023
 - (d) include reasonable worst-case bush fire scenario to and from the battery storage and the associated bush fire management; and
 - (e) identify measures to eliminate the expansion of any fire incident including:
 - adequate fire safety systems and appropriate water supply;
 - separation and / or compartmentalisation of battery units; and
 - strategies and incident control measures specific to the battery storage design.

Following the Secretary's approval, the Applicant must implement the measures described in the Fire Safety Study.

Note: 'to the satisfaction of FRNSW' above means confirmation in writing from FRNSW that the study meets the requirements of FRNSW as required by the Department's Hazardous Industry Planning Advisory Paper No 2 'Fire Safety Study' guideline.

Storage and Handling of Dangerous Goods

- 24. The Applicant must store and handle all chemicals, fuels and oils used on-site in accordance with:
 - (a) the requirements of all relevant Australian Standards; and
 - (b) the NSW EPA's Storing and Handling of Liquids: Environmental Protection Participants Handbook if the chemicals are liquids.

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

24A. For the option of the purpose-built Battery Storage building, the quantities of dangerous goods stored and handled at the Battery Storage site must be below the threshold quantities listed in the Department's *Hazardous and Offensive Development Application Guidelines – Applying SEPP33* at all times

Operating Conditions

25. The Applicant must:

- (a) minimise the fire risks of the development, including managing vegetation fuel loads on-site;
- (b) ensure that the development:
 - includes at least a 10 metre defendable space around the perimeter of the solar array area and battery storage facility that permits unobstructed vehicle access;
 - manages the defendable space and solar array areas as an Asset Protection Zone;
 - complies with the relevant asset protection requirements in the RFS's Planning for Bushfire Protection 2019 (or equivalent) and Standards for Asset Protection Zones;
 - is suitably equipped to respond to any fires on site including provision of a 20,000 litre water supply tank fitted with a 65mm Storz fitting and a FRNSW compatible suction connection located adjacent to the internal access road:
- assist the RFS and emergency services as much as practicable if there is a fire in the vicinity of the (c) site: and
- notify the relevant local emergency management committee following construction of the (d) development, and prior to commencing operations.

Emergency Plan

- Prior to commissioning operations, the Applicant must develop and implement a comprehensive 26. Emergency Plan and detailed emergency procedures for the development, to the satisfaction of FRNSW and the RFS. The Applicant must keep two copies of the plan on-site in a prominent position adjacent to the site entry points at all times. The plan must:
 - be consistent with the Department's Hazardous Industry Planning Advisory Paper No. 1. (a) 'Emergency Planning';
 - (b) identify the fire risks and controls of the development; and
 - include procedures that would be implemented if there is a fire on-site or in the vicinity of the site. (c) (d)
 - include bushfire emergency management planning, including:
 - details of the location, management and maintenance of the Asset Protection Zone;
 - a list of works that should not be carried out during a total fire ban
 - details of how RFS would be notified, and procedures that would be implemented, in the event • that:
 - there is a fire on-site or in the vicinity of the site;
 - there are any activities on site that would have the potential to ignite surrounding vegetation; or
 - there are any proposed activities to be carried out during a bushfire danger period; and
 - include an Emergency Services Information Package in accordance with Emergency services information and tactical fire plan (FRNSW, 2019), to the satisfaction of FRNSW and RFS; and
 - prior to commencing construction of the Battery Storage: (e)
 - be updated in accordance with the findings of the Fire Safety Study required under Condition 23 of Schedule 3; and
 - include details of how the Battery Storage can be safely isolated in an emergency.

Following approval, the Applicant must implement the Emergency Plan for the duration of the development and following commencement of operations of the battery storage, keep a copy of the Emergency Services Information Package on-site in a prominent position adjacent to the site entry points at all times.

WASTE

- 27. The Applicant must:
 - minimise and manage the waste generated by the development in accordance with the EPA's (a) waste hierarchy objectives of avoidance, resource recovery and then disposal;
 - classify all waste generated on site in accordance with the EPA's Waste Classification Guidelines (b) 2014 (or its latest version);
 - store and handle all waste on site in accordance with its classification; (c)
 - (d) not receive or dispose of any waste on site; and
 - remove all waste from the site as soon as practicable, and ensure it is sent to an appropriately (e) licensed waste facility for disposal.

ACCOMMODATION AND EMPLOYMENT STRATEGY

- 28. Prior to commencing construction, the Applicant must prepare an Accommodation and Employment Strategy for the development in consultation with Council, and to the satisfaction of the Secretary. This strategy must:
 - (a) propose a strategy to ensure there is sufficient accommodation for the workforce associated with the development;
 - (b) consider the cumulative impacts associated with other State significant development projects in the area;
 - (c) investigate options for prioritising the employment of local workers for the construction and operation of the development, where feasible;
 - (d) include a program to monitor and review the effectiveness of the strategy over the life of the development, including regular monitoring and review during construction.

Following the Secretary's approval, the Applicant must implement the Accommodation and Employment Strategy.

DECOMMISSIONING AND REHABILITATION

29. Within 18 months of the cessation of operations, unless the Secretary agrees otherwise, the Applicant must rehabilitate the site to the satisfaction of the Secretary. This rehabilitation must comply with the objectives in Table 3.

Feature	Objective
Site	 Safe, stable and non-polluting Minimise the visual impact of any above ground ancillary infrastructure agreed to be retained for an alternative use
Solar farm infrastructure	 To be decommissioned and removed, unless the Secretary agrees otherwise
Land use	 Restore land capability to pre-existing use (at least Class 3 Land Capability for areas of mapped Biophysical Strategic Agricultural Land)
Community	Ensure public safety at all times

Table 3: Rehabilitation Objectives

- 30. Within 3 years of commencement of operation, the Applicant must prepare a Decommissioning & Rehabilitation Plan for the development which shall be reviewed by the Applicant prior to the cessation of operations, to the satisfaction of the Secretary. The plan must:
 - (a) include detailed completion criteria for evaluating compliance with the rehabilitation objectives in Table 3 above;
 - (b) describe the measures that would be implemented to:
 - decommission the development and rehabilitate the site in accordance with the objectives in Table 3;
 - minimise and manage the waste generated by the decommissioning of the development in accordance with the obligations in condition 27 above; and
 - (c) include a program to monitor and report on the implementation of these measures against the detailed completion criteria.

The Applicant must decommission and rehabilitate the site in accordance with the approved Decommissioning & Rehabilitation Plan.

SCHEDULE 4 ENVIRONMENTAL MANAGEMENT AND REPORTING

ENVIRONMENTAL MANAGEMENT

Environmental Management Strategy

- 1. Prior to commencing the development, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must:
 - (a) provide the strategic framework for environmental management of the development;
 - (b) identify the statutory approvals that apply to the development;
 - (c) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;
 - (d) describe the procedures that would be implemented to:
 - keep the local community and relevant agencies informed about the operation and environmental performance of the development;
 - receive, handle, respond to, and record complaints;
 - resolve any disputes that may arise;
 - respond to any non-compliance;
 - respond to emergencies; and
 - (e) include:
 - references to any plans approved under the conditions of this consent; and
 - a clear plan depicting all the monitoring to be carried out in relation to the development.

Following the Secretary's approval, the Applicant must implement the Environmental Management Strategy.

Revision of Strategies, Plans and Programs

- 2. The Applicant must:
 - (a) update the strategies, plans or programs required under this consent to the satisfaction of the Secretary prior to carrying out any upgrading or decommissioning activities on site; and
 - (b) review and, if necessary, revise the strategies, plans or programs required under this consent to the satisfaction of the Secretary within 1 month of the:
 - submission of an incident report under condition 7 of Schedule 4;
 - submission of an audit report under condition 9 of Schedule 4; and
 - (c) review and, if necessary, revise the strategies, plans or programs required under this consent to the satisfaction of the Secretary prior to carrying out works associated with any modification to the conditions of this consent.

Updating and Staging of Strategies, Plans or Programs

3. With the approval of the Secretary, the Applicant may submit any strategy, plan or program required by this consent on a progressive basis.

To ensure the strategies, plans or programs under the conditions of this consent are updated on a regular basis, the Applicant may at any time submit revised strategies, plans or programs to the Secretary for approval.

With the agreement of the Secretary, the Applicant may prepare any revised strategy, plan or program without undertaking consultation with all the parties referred to under the relevant condition of this consent.

Notes:

- While any strategy, plan or program may be submitted on a progressive basis, the Applicant must ensure that all development being carried out on site is covered by suitable strategies, plans or programs at all times.
- If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must
 clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to
 any future stages, and the trigger for updating the strategy, plan or program.

NOTIFICATIONS

Notification of Department

4. Prior to commencing the construction, operations, upgrading or decommissioning of the development or the cessation of operations, the Applicant must notify the Secretary in writing via the Major Projects website portal of the date of commencement, or cessation, of the relevant phase. If any of these phases of the development are to be staged, then the Applicant must notify the Secretary in writing prior to commencing the relevant stage, and clearly identify the development that would be carried out during the relevant stage.

Final Layout Plans

5. Prior to commencing construction, the Applicant must submit detailed plans of the final layout of the development to the Secretary, including details on the siting of solar panels and ancillary infrastructure, via the Major Projects website.

Work as Executed Plans

6. Prior to commencing operations, or following the upgrades of any solar panels or ancillary infrastructure, the Applicant must submit work as executed plans of the development to the Secretary, via the Major Projects website.

COMPLIANCE

Incident Notification

7. The Planning Secretary must be notified in writing via the Major Projects website portal immediately after the Applicant becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one), and set out the location and nature of the incident. Subsequent notification requirements must be given, and reports submitted in accordance with the requirements set out in Appendix 5.

Non-Compliance Notification

- 8. The Planning Secretary must be notified in writing via the Major Projects website portal within 7 days after the Applicant becomes aware of any non-compliance.
- 9. A non-compliance notification must identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been done, or will be, undertaken to address the non-compliance.
- 10. A non-compliance which has been notified as an incident does not need to also be notified as a noncompliance.

INDEPENDENT ENVIRONMENTAL AUDIT

- 11. Independent Audits of the development must be conducted and carried out in accordance with the Independent Audit Post Approval Requirements (2020) to the following frequency:
 - (a) within 3 months of commencing construction; and (b) within 3 months of commencement of operations.
- 11A. Proposed independent auditors be agreed to in writing by the Planning Secretary prior to the commencement of an Independent Audit.
- 11B. The Planning Secretary may require the initial and subsequent Independent Audits to be undertaken at different times to those specified in condition 9 of Schedule 4 upon giving at least 4 weeks' notice to the Applicant of the date upon which the audit must be commenced.
- 11C. In accordance with the specific requirements of the *Independent Audit Post Approval Requirements* (2020), the Applicant must:
 - a. review and respond to each Independent Audit Report prepared under condition 7 of Schedule 4 of the consent, or condition 9B of Schedule where notice is given by the Planning Secretary;
 - b. submit the response to the Planning Secretary; and
 - c. make each Independent Audit Report, and response to it, publicly available within 60 days of submission to the Planning Secretary unless otherwise agreed by the Planning Secretary.
- 11D. Independent Audit Reports and the Applicant's response to audit findings must be submitted to the Planning Secretary within 2 months of undertaking the independent audit and site inspection as outlined in

the Independent Audit Post Approvals Requirements (2020) unless otherwise agreed by the Planning Secretary.

11E. Notwithstanding the requirements of the *Independent Audit Post Approval Requirements* (2020), the Planning Secretary may approve a request or ongoing independent operational audits to be ceased, where it has been demonstrated to the Planning Secretary's satisfaction that independent operational audits have demonstrated operational compliance.

ACCESS TO INFORMATION

- 12. The Applicant must:
 - (a) make the following information publicly available on its website as relevant to the stage of the development:
 - the EIS;
 - the final layout plans for the development (Schedule 4, Condition 5);
 - current statutory approvals for the development;
 - approved strategies, plans or programs required under the conditions of this consent;
 - the proposed staging plans for the development if the construction, operation or decommissioning of the development is to be staged;
 - how complaints about the development can be made;
 - a complaints register;
 - compliance reports;
 - any independent environmental audit, and the Applicant's response to the recommendations in any audit; and
 - any other matter required by the Secretary; and
 - (b) keep this information up to date.
APPENDIX 1 GENERAL LAYOUT OF DEVELOPMENT



APPENDIX 2 SCHEDULE OF LAND

Lot	Deposited Plan (DP)	Lot	Deposited Plan (DP)
2	DP567937	4	DP172594
82	DP755814	DP755814 B	
183	DP755827	78	DP755814
154	DP755827	84	DP755814
79	DP755814	83	DP755814
202	DP755814	80	DP755814
109	DP755827	181	DP755827
108	DP755827	182	DP755827
89	DP755827	97	DP755827
103	DP755827	2	DP127777
101	DP755827	1	DP127777
102	DP755827	39	DP755827
90	DP755827	38	DP755827
113	DP755827	5	DP127777
91	DP755827	1	DP405515
111	DP755827	37	DP755827
110	DP755827	296	DP755827
93	DP755827	221	DP755814
92	DP755827	2	DP174053
98	DP755827	1 (part lot)	DP227322
122	DP755827	8	DP173619
123	DP755827	6	DP172594
125	DP755827	21	DP1167870
124	DP755827	23	DP1171290
126	DP755827	24	DP1171290
7001	DP1072093	170	DP755814
4	DP587246	2	DP587246
3	DP109536	20 4	DP755814
203	DP755814	4	DP1005647
4	DP1015933	300	DP1036398
4	DP1026550	206	DP755814
207	DP755814	2 4	DP1171290
216	DP755814	201	DP755814
150	DP755827	120	DP755827
112	DP755827	119	DP755827
101	DP1262005	36	DP755827

2	DP127778	1	DP319048
5	DP1254486	3	DP127777
22	DP1286357		

Notes:

- The project site will also be taken to include any crown land and road reserves contained within the project site
- The extent of Lot 1 of DP 227322 within the development footprint is 205.4 hectares, which represents approximately 8.4% of the total lot. Subsequently, the full extent of Lot 1 of DP 227322 has been excluded from the project boundary

APPENDIX 3 SUBDIVISION PLAN



APPENDIX 4 ROAD UPGRADES AND SITE ACCESS

Road	Location ¹ Upgrade Requirements		Timing	
New England Highway and Barleyfields Road (north)	Intersection	Channelised Right Turn (CHR) treatment for the largest vehicle assessing the site (excluding over-dimensional vehicles) ²		
Barleyfields Road	Between New England Highway and Big Ridge Road	Seal to a width of 7.2 m with 1 m unsealed shoulders (total carriageway 9.2 m) ²		
Barleyfields Road and Big Ridge Road Intersection		Basic Left Turn (BAL) treatment to cater for the largest vehicle accessing the site (excluding over-dimensional vehicles) ²	Prior to construction	
	Segment 1	Seal to a width of 7.2 m with 1 m unsealed		
	Segment 3	shoulders (total carriageway of 9.2 m) ²		
Big Ridge Road	Segment 4	Gravel (unsealed) carriageway to a width		
	Segment 5	of 8.7 m		
	Site access points	Rural Property Access Type ²]	

¹ Refer to the figure in Appendix 4 for the location and further details of the road upgrades.

² Upgrades must comply with the Austroads Guide to Road Design (as amended by RMS supplements).









Proposed road upgrade disturbance boundary

New England Solar Farm Modification report Figure A.1





Proposed road upgrade disturbance boundary

Jarv



NSW Government Planning and Environment





Proposed road upgrade disturbance boundary







KEY
Proposed road upgrade disturbance boundary
Previously assessed and approved
road upgrade disturbance boundary
Development footprint
Surveyed cadastral boundary
Rail line
Main road
Local road
Uatercourse/drainage line
Watercook/
Cadastral boundary (DFSI 2017)
Maintained easement

Proposed road upgrade disturbance boundary

New England Solar Farm Modification report Figure A.4 EMM



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New England Solar Farm Modification report Figure A.6





NSW Government Planning and Environment





Proposed road upgrade disturbance boundary









NSW Government Planning and Environment





KEY
Proposed road upgrade disturbance boundary
Previously assessed and approved
road upgrade disturbance boundary
Development footprint
Surveyed cadastral boundary
Rail line
Main road
Local road
Watercourse/drainage line
Watercourse/drainage line
Cadastral boundary (DFSI 2017)
Maintained easement

Proposed road upgrade disturbance boundary

> New England Solar Farm Modification report Figure A.12







APPENDIX 5 ABORIGINAL HERITAGE ITEMS

Table 1: Aboriginal heritage items - avoid impacts

	Site	
NE01	NE37	NE73
NE04	NE38	NE77
NE07	NE39	NE78
NE09	NE40	NE79
NE11	NE41	NE80
NE12	NE43	NE83
NE14	NE44	NE84
NE17	NE45	NE86
NE19	NE47	NE87
NE20	NE50	NE93
NE21	NE58	NE94
NE22	NE67	NE95
NE23	NE68	NE96
NE24	NE70*	NE97
NE25	NE71	NE100
NE26	NE72	NE102
NE27*	NE104	NE105
NE106	NE107	N108
NE109	NE110	NE111
NE112	NE113	NE114
NE115	NE116	NE117
NE118		

* Only items outside the development footprint are to be avoided.

Table 2: Aboriginal	heritage items -	surface	collection salvage

	Site	
NE02	NE46	NE74
NE03	NE48	NE75
NE05	NE49	NE76
NE06	NE59	NE82
NE08	NE60	NE88
NE10	NE62	NE89
NE13	NE63	NE90
NE15	NE64	NE91
NE16	NE65	NE92
NE18	NE66	NE98
NE27*	NE69	NE99
NE42	NE70*	NE119
NE20		

* Only items within the development footprint are to be impacted.



APPENDIX 6 HISTORIC HERITAGE ITEMS

Table 1: Historic heritage items - avoid impacts

	Site	Site		
HNE14	Granite tors	HNE19	Remnant house archaeological site	
HNE17	Gostwyck Shepherd's Hut	HNE35	Old Gostwyck platform 3	
HNE18	Stockyard	HNE36	Suamarez Hut archaeological site	
HNE20	Old Gostwyck Road*	HNE28 Spring Camp house		
* Only agoti	one of the read outside the developme	nt footprint	ara ta ha avaidad	

Only sections of the road outside the development footprint are to be avoided.

Table 2: Historic heritage items - impacted

	Site		Site
HNE15	View through Gostwyck Station	HNE34	Former stockyards
HNE16	View from granite tors	HNE41	Rows of poplars
HNE21	Former fence line	HNE43	Former fence line
HNE20	Old Gostwyck Road *		

* Only sections of the road within the development footprint are to be impacted.



- Proposed primary site access point
- Physical Visual
 Visual
 Avoidance buffer (HNE14)





APPENDIX 7

INCIDENT NOTIFICATION AND REPORTING REQUIREMENTS

WRITTEN INCIDENT NOTIFICATION REQUIREMENTS

- 1. A written incident notification addressing the requirements set out below must be submitted to the Planning Secretary via the Major Projects website within seven days after the Applicant becomes aware of an incident. Notification is required to be given under this condition even if the Applicant fails to give the notification required under condition 7 of Schedule 4 or, having given such notification, subsequently forms the view that an incident has not occurred.
- 2. Written notification of an incident must:
 - a. identify the development and application number;
 - b. provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident);
 - c. identify how the incident was detected;
 - d. identify when the applicant became aware of the incident;
 - e. identify any actual or potential non-compliance with conditions of consent;
 - f. describe what immediate steps were taken in relation to the incident;
 - g. identify further action(s) that will be taken in relation to the incident; and
 - h. identify a project contact for further communication regarding the incident.
- 3. Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, the Applicant must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.
- 4. The Incident Report must include:
 - a. a summary of the incident;
 - b. outcomes of an incident investigation, including identification of the cause of the incident;
 - c. details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and
 - d. details of any communication with other stakeholders regarding the incident.



APPENDIX D MONITORING SCHEDULE



NES Monitoring Schedule

Stages: Stage 1b – Operations – 400MW PV Stage 2a – Construction – 320MW PV Stage 3a – Construction – 200MW/2hr BESS



ACEN Australia

96b Bridge Street, Uralla, NSW 2358

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1 Inspections, monitoring and auditing

1.1 Site inspections and monitoring

Regular site inspections, as detailed below, will be a key component of the environmental monitoring program.

During the works, all staff will conduct regular inspections to confirm compliance with the EMS and subplans and to ensure all construction footprints are compliant with approved development plans. Inspection records will be maintained by each contractor, and reported to ACEN Australia on a regular basis using environmental and safety inspection checklists.

Key environmental risks and issues will be discussed at pre-starts taking into account the specific risks and issues associated with the proposed day's work (e.g. associated with the specific activities to be undertaken, and external risk factors such as the weather). Risks and issues are updated daily and communicated to the wider team.

1.1.1 Daily inspections

During the construction and operations phase of the project, the Construction and Operations Project Manager will ensure that site personnel are undertaking daily inspections of the construction and operational activities they are overseeing to ensure general compliance with the EMS and subplans. All areas identified for improvement will be addressed directly and inspection will be recorded in daily checklists.

1.1.2 Weekly monitoring

Once per week (at least) during construction and operations, the Construction and Operations Project Manager and/or delegate(s) will conduct monitoring of construction and operational activities to ensure compliance with the EMS and subplans. All areas identified for improvement will be added to a corrective action register.

1.1.3 Monthly inspections

Once per month (at least) during construction and operations, the Construction and Operations Project Manager and/or delegate(s) will conduct a thorough inspection of construction and operational activities to ensure compliance with the EMS and subplans. The Construction and Operations Project Managers and/or delegate(s) will also conduct an inspection of the condition of the roads for, and responding to, any emergency repair and/or maintenance requirements.

Table 1 and Table 2 below outline when inspections are required per phase of the project and the frequency of each aspect.

Aspect	Frequency				Stage	
Tuananant	Deily	Daily Modely Fartnichtly Manthly As required				
Transport	Daily	Weekly	Fortnightly	Monthly	As required	01
Traffic control measures	-	-	-	-	Yes	Stage 1b
measures	Yes	-	-	-	Yes	Stage 2a
	Yes	-	-	-	Yes	Stage 3a
Maintenance		C	nce every 2 ye	ears		Stage 1b
	Yes	-	-	-	Yes	Stage 2a
						Upon completion
	Yes	-	-	-	Yes	Stage 3a
						Upon Completion
Land	Daily	Weekly	Fortnightly	Monthly	As	Stage
management					required*	
EMS	-	-	-	-	Yes	Stage 1b
	-	Yes	-	-	Yes	Stage 2a
	-	-	-	-	-	Stage 3a
Air quality and	Daily	Weekly	Fortnightly	Monthly	As required	Stage
dust						
Dust	-	Yes	-	-	-	Stage 1b
	Yes	-	-	-	-	Stage 2a
*during dry conditions	Yes	-	-	-	-	Stage 3a
Emissions			N/A			Stage 1b
	-	-	Yes	-	-	Stage 2a
	_	-	Yes	-	-	Stage 3a
Biodiversity	Daily	Weekly	Fortnightly	Monthly	As required	Stage
Ecology			N/A			Stage 1b
	_	-	-	Yes		Stage 2a
	_	_	_	Yes		Stage 3a
Rehabilitation				_	Yes	Stage 1b
						Annually
		_	_	_	Yes	Stage 2a
	_	_	_	_	Yes	Stage 3a
Signage			N/A			Stage 1b
0.9.10.90	_	_	-	_	Yes	Stage 2a
	_		_		Yes	Stage 3a
Clearing			-		Yes	Stage 1b
oreanny			- Yes		Yes	
	-	-		-		Stage 2a
0	-	-	Yes	-	Yes	Stage 3a
Speed limits	Yes	-	-	-	-	Stage 1b
	Yes	-	-	-	-	Stage 2a
	Yes	-	-	-	-	Stage 3a
Contamination			N/A			Stage 1b
	-	Yes	-	-	-	Stage 2a
	_	Yes	-	-	-	Stage 3a

Table 1 Site inspection and monitoring frequency matrix

Lighting			N/A			Stage 1b
gg	_	Yes	_	_	_	Stage 2a
	_	Yes	_	_	_	Stage 3a
Weeds and feral	_	-		Yes		Stage 1b
animals	_	Yes	_	-	_	Stage 2a
	_	Yes	_	_	_	Stage 3a
Threatened	-	-			Yes	Stage 1b
species			-	-		-
opeeree	-	-	-	-	Yes	Stage 2a
	-	-	-	- N 4 - 1- 1- 1- 1-	Yes	Stage 3a
Noise and vibration	Daily	Weekly	Fortnightly	Monthly	As required	Stage
Noise minimisation	Yes	-	-	Yes	-	Stage 1b
	-	-	-	-	Yes	Stage 2a
	-	-	-	-	Yes	Stage 3a
Visual	Daily	Weekly	Fortnightly	Monthly	As required	Stage
environment						
Visual pollution	-	-	-	-	Yes	Stage 1b
	-	Yes	-	-	Yes	Stage 2a
	-	Yes	-	-	Yes	Stage 3a
Light spill	-	-	-	-	Yes	Stage 1b
	-	-	-	-	Yes	Stage 2a
	_	-	-	-	Yes	Stage 3a
Aboriginal	Daily	Weekly	Fortnightly	Monthly	As required	Stage
Heritage					· ·	
Aboriginal Heritage	-	-	-	Yes	Yes	Stage 1b
protection	-	-	-	Yes	Yes	Stage 2a
			N/A		È	Stage 3a
New finds	-	-	-	-	Yes	Stage 1b
	-	-	-	-	Yes	Stage 2a
	_	-	-	-	Yes	Stage 3a
Vehicle impacts			N/A			Stage 1b
	_	_	-	-	Yes	Stage 2a
	_	-	-	-	Yes	Stage 3a
Cultural Heritage	Daily	Weekly	Fortnightly	Monthly	As required	Stage
Cultural Heritage	-	-	-	Yes	-	Stage 1b
Site protection	_	-	-	Yes	_	Stage 2a
	_	_	_	Yes	-	Stage 3a
Soil and water	Daily	Weekly	Fortnightly	Monthly	As required	Stage
		.,		-	Yes	Stage 1b
Erosion	-	-	-			
Erosion	-	- Yes	-	_	-	-
Erosion		- Yes	-	-	-	Stage 2a
		- Yes Yes	-			Stage 2a Stage 3a
Erosion Creek Crossing			-	-	-	Stage 2a Stage 3a Stage 1b
			- - N/A -	-	-	Stage 2a Stage 3a Stage 1b Stage 2a
			-	-	-	Stage 2a Stage 3a Stage 1b

Fire risk	Yes*	Yes	-	Yes	-	Stage 2a
management	Yes*	Yes	-	Yes	-	Stage 3a
*during high risk days						
Waste management	Daily	Weekly	Fortnightly	Monthly	As required	Stage
Waste	-	-	-	-	Yes	Stage 1b
management	-	Yes	-	Yes	Yes	Stage 2a
	-	Yes	-	Yes	Yes	Stage 3a
Waste			Stage 1b			
classification	-	Yes	-	-	-	Stage 2a
	-	Yes	-	-		Stage 3a
Waste	-	-	-	Yes	-	Stage 1b
Management	-	-	-	Yes	-	Stage 2a
Register	-	-	-	Yes	-	Stage 3a
Socio-economic environment	Daily	Weekly	Fortnightly	Monthly	As required	Stage
Accommodation	-	-	-	-	Yes	Stage 1b
			Stage 2a			
			Every 6 mont	hs		Stage 3a

Aspect	Purpose of monitoring	Monitoring	Frequency	Responsibility
Transport				
Traffic	Each contractor will liaise with construction personnel, sub-contractors and suppliers and develop a response to local climate conditions that may affect road safety, such as fog, dust, wind, wet weather and flooding.	 This will include, but is not limited to the following: Monitoring of daily weather forecast and provision of a report to staff and heavy vehicle operators Inclusion of any adverse weather forecast in toolbox talk topics Watering of roads during dry conditions to ensure appropriate mitigation of dust Monitoring bush fire forecasts and conditions during the dry season and conveyance of relevant information, as appropriate. 	Daily during all stages of the project.	Stage 2a and 3a EPC Contractor Project Manager Stage 1b Operations Manager (GLC)
	To confirm the current measures within the TMP are adequate during the proposed period of increased heavy vehicle movements	Weekly monitoring of the New England Highway/ Barleyfields Road (North) intersection will also be conducted during peak times.	Weekly during peak construction times	Stage 2a EPC Construction Project Manager
	To ensure compliance is achieved with the development consent with	Forecasting will be completed by all contractors for the following week's predicted daily traffic movements. These numbers will be verified by ACEN Australia's Traffic Management Coordinator the day prior to vehicle	Weekly during peak periods.	Stage 2a and 3a EPC Contractor Project Manager

Table 2 New England Solar Environmental Monitoring Plan

Aspect	Purpose of monitoring	Monitoring	Frequency	Responsibility
	respect to daily traffic movements.	movements occurring to confirm the total cap per contractor.		Stage 1b Operations Manager (GLC)
		If a contractor is close to exceeding their allocated daily cap, they will be notified by ACEN Australia's Traffic Management Coordinator and it will be the Contractor's Project Managers (or delegate) responsibility to ensure the cap is not being exceeded. If the cap is exceeded, this will be reported to ACEN Australia who will discuss with the contractor next steps. Failure to comply with the development consent may results in dismissal of the contractor.		
	Independent audits will be undertaken as per the requirements set out in the development consent to review the performance and progress of the Traffic Management Plan.	 In addition, auditing will be conducted, which will include: A review of traffic management and control measures on site and on the access route. Ensuring dirt being tracked onto the sealed public road network is being minimised (i.e. development-related vehicles leaving the site are in suitably clean condition). Ensuring that development-related vehicles are using the approved access route and not 	Every 2 months during construction	Stage 2a and 3a EPC Contractor Project Manager
		 Auditing reports are to be maintained so as to provide evidence of conformity to the Traffic Management Plan. 		
Maintenance	Road maintenance of Big Ridge Road	 A visual inspection of the road shall be carried out every 2 years by an inspector with a minimum of 5 years' experience in road maintenance. 	Every two years once in operations	Stage 1b Operations Manager (GLC)

Aspect	Purpose of monitoring	Monitoring	Frequency	Responsibility
		 The South African Approach shall be used to classify the road condition. A copy of the Draft TMH12 is provided in Appendix D of the TMP. 		
		 The Type, degree and extent of distress shall determine the intervention to be followed - see Error! Reference source not found. in the TMP as a guide. 		
		 Interventions shall be undertaken on road segments that are classified as poor and very poor 		
		The condition of Barleyfields Road (North) and Big Ridge Road after each stage is constructed will be compared to their condition prior to the commencement of construction. Any degradation in the condition of the road, as identified through differences evident in the pre and post construction dilapidation surveys, will effectively become the road repair works required.	At completion of each Stage	Stage 1a, 2a and 3a EPC Contractor Project Manager Stage 1b Operations Manager (GLC)
Land manageme	ent			
	To ensure all personnel involved in the Project are aware of the requirements of the EMS, and to ensure the implementation of environmental management measures.	 Prior to working on site all personnel and sub- contractors will undertake an online site-specific induction covering environmental aspects. The environmental induction will address a range of issues including, but not limited to: Purpose and objectives of EMS. Requirements of due diligence and duty of care. Roles and responsibilities. 	Incidental	Contractors HSE Manager

Aspect	Purpose of monitoring	Monitoring	Frequency	Responsibility
		 Typical project environmental hazards and risks, including: 		
		No go and exclusion zones		
		Location of sensitive environmental areas		
		Community sensitivities		
		 Environmental emergency and incident procedures and locations of emergency spill kits. 		
		 Management and reporting process for environmental incidents. 		
		A record of all environment inductions will be maintained and kept on-site.		
Biodiversity	·			
Ecology	Ensure no erosion or damage to protected areas.	Monthly inspections of high disturbance areas, groundcover, protected woodland areas and boundary fence lines.	Monthly during construction.	Stage 2a and Stage 3a EPC Contractor Project Manager
Rehabilitation	Rehabilitating and revegetating temporary disturbance areas with	 70% perennial cover by 6 months or suitable mulch coverage if season unfavourable for seed growth. 	6 and 18 months after construction	Stage 2a and 3a EPC Contractor Project Manager
	species that are endemic to the area.	• 70% perennial ground cover by 18 months.		Stage 1b Operations
	נווכ מוכמ.	 Salvaged soils and logs used where appropriate. 		Manager (GLC)
		 Ecological inspection, quadrats of 2 m x 2 m in barest areas 		

Aspect	Purpose of monitoring	Monitoring	Frequency	Responsibility
	Manage the remnant vegetation and fauna habitat on site.	Monitoring any improvement by any margin in overall vegetation integrity score and if high threat weed cover meets its targets in its own specific management measures through photo points, and rapid data plots collecting at least 3 dominant species cover per strata in 20x20 metre quadrats.	Annually for three years post construction	Stage 1b Operations Manager (GLC)
Signage	Clearing limits will be clearly marked to prevent clearing beyond the extent of the NES development footprint. Tree clearing and disturbance will be limited to the development footprint of the NES.	All no-go zones clearly marked with bunting or similar, prior to clearing. Security fencing, or bunting fencing or similar is to be installed along the Fence Perimeter prior to the commencement of vegetation clearing within the Project Boundary. Construction of the fence line itself can constitute a disturbance event so the temporary "environmental protection area" demarcation will remain in place until the completion of the perimeter fence. Trees for removal will be clearly marked. Trees for retention unmarked or protected with bunting string if at risk of incursion into the Tree Protection Zone	Preconstruction	Stage 2a and 3a EPC Contractor Project Manager / Project Ecologist
	Monitor movement in protected areas.	Appropriate signage such as 'No Go Zone' or 'Environmental Protection Area' will be installed. All protected areas have signage that is undamaged. Identify the location of any 'No Go Zones' in site inductions.	Preconstruction Identify location during inductions in construction and operations.	Stage 2a and 3a EPC Contractor Project Manager / Stage 1b Operations Manager (GLC)
Clearing	Maximise the salvage of vegetative and soil resources from clearing activity within the development footprint for beneficial re-use in the	Salvaged logs and soils are relocated at appropriate ecological density and locations. Re-use soils from areas with good native groundcover and few weeds.	During clearing	Stage 2a and 3a EPC Contractor Project Manager ACEN Australia Project Manager

Aspect	Purpose of monitoring	Monitoring	Frequency	Responsibility
	enhancement or the rehabilitation of the site.	Observe salvage at time of clearing, material is used as soon as practical and inspected during rehabilitation monitoring.		
	Avoid and minimise clearing impacts to native PCTs where possible.	No clearing of protected native vegetation or fauna habitat as mapped. No clearing outside of the approved development footprint. Vegetation designated for Biodiversity offset credit obligations, or low quality native PCT not requiring offset in the development footprint may be cleared to the minimum practicable extent. Clearing impacts within the approved area for clearing in the development footprint is minimised wherever practicable.	Weekly during construction	Stage 2a and 3a EPC Contractor Project Manager
	Protection of habitat within project boundary	A tree clearing procedure will include preclearance surveys to determine if any nesting birds are present. Trees spray painted "H" for habitat tree. Unexpected threatened species find protocol triggered if required.	Before clearing	Stage 2a and 3a EPC Contractor Project Manager
		No clearing of hollow bearing trees in spring or contingency alternative with consent authority.	Before clearing	Stage 2a and 3a EPC Contractor Project Manager
		A suitably trained fauna handler will be present during hollow bearing tree (including dead hollow-bearing trees) clearing to rescue and relocate displaced fauna if found on-site. All fauna rescued or relocated. Trigger unexpected finds protocol if threatened species found.	During clearing	Stage 2a and 3a EPC Contractor Project Manager ACEN Australia Project Manager

Aspect	Purpose of monitoring	Monitoring	Frequency	Responsibility
		Installation of appropriate exclusion fencing around trees and woodland to be retained within the NESF development footprint whilst construction is occurring. Trees at risk of unintended soil disturbance have their TPZ guarded by staking or fencing. Incursion into the TPZ is acceptable in the case where a tree can be retained within the development footprint if it otherwise would warrant removal.	Before clearing	Stage 2a and 3a EPC Contractor Project Manager
Speed limits	Vehicle collision with fauna	Speed limits within the NES development footprint will be limited to 40 km/hr.	Reiterated daily during construction and operations.	Stage 2a and 3a EPC Contractor Project Manager Stage 1b Operations Manager (GLC)
Contamination	Transfer of weeds and pathogen to and from site	Appropriate wash down facilities will be available to clean vehicles and equipment prior to arrival and when leaving site. In particular, ensure soils and seed material isn't transferred.	Daily/weekly	Stage 2a and 3a EPC Contractor Project Manager
Lighting	Artificial lighting impacting fauna behaviour	Lighting to comply with Australian standard AS4282:2019 – Control of Obtrusive Effects of Outdoor Lighting.	Weekly during construction	Stage 2a and 3a EPC Contractor Project Manager
Weeds	Manage priority weeds and non-priority weeds across the development footprint.	Ongoing weed management will continue during construction and operations. Reporting on the effectiveness of management will be included in annual reporting.	Weekly during construction.	Stage 2a and 3a EPC Contractor Project Manager

Aspect	Purpose of monitoring	Monitoring	Frequency	Responsibility
			Monthly during operations.	Stage 1b Operations Manager (GLC)
Threatened Species	Management of threatened species within the project boundary	 Should threatened fauna, or suspected threatened fauna, be encountered, the following procedure is to be followed: a) Stop work immediately in the vicinity of the species b) The area around the species is to be cordoned off, including an appropriate buffer aera c) Notify the Stage 2a EPC Contractor Project Manager, and others as relevant d) Seek advice from an ecologist or species expert to confirm identification; and e) if a threatened species is confirmed, consult with the relevant agencies to determine appropriate mitigation and management measures and additional approvals (if required). 	Incidental (upon observation)	All staff
N1 Vegetation Screen	Ensure tree screening is free of weeds	Ongoing weed management which will be reported on annually.	Annually	ACEN Australia Operations Manager
Air quality and	dust			
Dust	To identify dust generation requiring management	Visual inspection of construction activities including vehicle, plant and equipment movement; vegetation clearance; and earthworks for dust generation; dust suppression measures. Ensure Dust is being managed appropriately (e.g. water carts).	Daily during dry conditions, particularly when windy Weekly at all other times	Stage 2a and 3a EPC Contractor Project Manager Stage 1b Operations Manager (GLC)

Aspect	Purpose of monitoring	Monitoring	Frequency	Responsibility
		Visual inspection of disturbed areas and stockpiles for dust generation	Daily during dry conditions, particularly when windy	
			Weekly at all other times	
Visual environn	nent			
Visual pollution	To ensure that impacts on the surrounding visual environment are minimised	Checking that temporary hoardings, barriers, traffic management and signage have been removed when no longer required	After removal	Stage 2a and 3a EPC Contractor Project Manager Stage 1b Operations Manager (GLC)
		Regularly inspecting the site to ensure it is kept tidy and well maintained and that packaging materials are being securely stored and regularly removed	Weekly and in response to any complaints	Stage 2a and 3a EPC Contractor Project Manager Stage 1b Operations Manager (GLC)
Light spill	To ensure that impacts on the surrounding visual environment are minimised	Checking the light spill of the external lights after they are installed to ensure impacts to sensitive receivers are minimised	After installation and in response to any complaints	Stage 2a and 3a EPC Contractor Project Manager Stage 1b Operations Manager (GLC)
Aboriginal Herit	tage			

Aspect	Purpose of monitoring	Monitoring	Frequency	Responsibility
	Removal of barriers upon completion of construction.	At the end of construction, ACEN Australia will assess the need for ongoing active protection of the sites given operations of the facility is low impact. If ACEN Australia determines that the site does not require active protection during operations, ACEN Australia may remove the barriers with the exception of scarred tree and grinding groove sites.	Completion of construction.	ACEN Australia Project Manager
	Tree conditions.	ACEN Australia has developed an ongoing site visual condition assessment program with RAPs which includes provisions to audit tree condition on a monthly basis so that suitable management measures can be carried out with the aim to prevent tree collapse or salvage trees that face imminent collapse.	Monthly during all stages.	Stage 2a EPC Contractor Project Manager Stage 1b Operations Manager (GLC)
	Site fencing	Regular inspections of the fencing completed monthly or after periods of high wind will monitor whether the protection mechanisms are intact and have not impacted Aboriginal objects. This includes confirming signage is in place	Monthly or incidental (after high winds)	Stage 2a Contractor Project Manager Stage 1b Operations Manager (GLC)
Cultural heritage	e			
Cultural Heritage Sites Management Program	Site fencing	Regular inspections of the fencing completed monthly or after periods of high wind will monitor whether the protection mechanisms are intact and have not impacted Aboriginal objects. This includes confirming signage is in place	Monthly or incidental (after high winds)	Stage 2a EPC Contractor Project Manager Stage 1b Operations Manager (GLC)
Soil and water				

Aspect	Purpose of monitoring	Monitoring	Frequency	Responsibility
Erosion	Prevention of erosion or sedimentation exacerbated by NES	Source controls, such as mulching, matting and sediment fences, will be utilised where appropriate. Occurs until completion of rehabilitation works.	Incidental (after rain) during construction.	Stage 2a and 3a EPC Contractor Project Manager Stage 1b Operations Manager (GLC)
	To manage erosion and sediment runoff.	An erosion and sediment control (ESC) plan will be prepared in accordance with Managing Urban Stormwater: Soils and Construction (Landcom 2004) prior to commencement of construction.	Pre-construction for Stage 2a and Stage 3a	Stage 2a and 3a EPC Contractor Project Manager
	To decrease the risk of exposing disturbed areas.	Disturbed areas will be stabilised and rehabilitated as soon as possible.	Weekly during construction. Incidental during operations.	Stage 2a and 3a EPC Contractor Project Manager Stage 1b Operations Manager (GLC)
Creek Crossing	To decrease the risk of a loss of species habitat through disturbance of watercourse beds and banks.	A specific creek crossing sub-plan will be included as part of the Construction Environmental Management Plan (CEMP) as part of Stage 2a works. All creek crossings are to comply with the Policy and Guidelines for Fish Friendly Waterway Crossings (DPI undated)	Preconstruction Monitored monthly during construction	Stage 2a EPC Contractor Project Manager
Hazards				
Fire risk management	Ensure firefighting services have suitable and	Inspection of vehicle access routes to confirm that access is being maintained (including access to the APZ and static water supplies)	Weekly during construction, and opportunistically	Stage 2a EPC Contractor Project Manager

Purpose of monitoring	Monitoring	Frequency	Responsibility
unobstructed vehicle access to the site			Stage 1b Operations Manager (GLC)
	Inspection to ensure that on total fire ban days banned activities are not occurring (e.g. works with potential to cause a spark or ignition, vehicle operation over unmanaged grass areas)	Daily during total fire ban days	Stage 2a and 3a EPC Contractor Project Manager Stage 1b Operations Manager (GLC)
To determine slashing requirements and frequency	Monitor the standing fuel load across the site on a monthly basis.	Monthly	Stage 2a and 3a EPC Contractor Project Manager Stage 1b Operations Manager (GLC)
Ensure fire water supply provisions are maintained	Inspection of water levels and volumes in fire water supply tanks	Weekly	Stage 2a and 3a EPC Contractor Project Manager Stage 1b Operations Manager (GLC)
Pre-warning of potential bushfire approach	Monitor NSW RFS and BOM websites for bushfire alerts	Daily/ hourly during high / extreme / catastrophic fire danger periods	Stage 2a and 3a EPC Contractor Project Manager Stage 1b Operations Manager (GLC)
	unobstructed vehicle access to the site Image: Construct of the site Image: Construct	unobstructed vehicle access to the siteInspection to ensure that on total fire ban days banned activities are not occurring (e.g. works with potential to cause a spark or ignition, vehicle operation over unmanaged grass areas)To determine slashing requirements and frequencyMonitor the standing fuel load across the site on a monthly basis.Ensure fire water supply provisions are maintainedInspection of water levels and volumes in fire water supply tanksPre-warning of potentialMonitor NSW RFS and BOM websites for bushfire alerts	unobstructed vehicle access to the site Inspection to ensure that on total fire ban days banned activities are not occurring (e.g. works with potential to cause a spark or ignition, vehicle operation over unmanaged grass areas) Daily during total fire ban days To determine slashing requirements and frequency Monitor the standing fuel load across the site on a monthly basis. Monthly Ensure fire water supply provisions are maintained Inspection of water levels and volumes in fire water supply tanks Weekly Pre-warning of potential bushfire approach Monitor NSW RFS and BOM websites for bushfire alerts catastrophic fire Daily/ hourly during high / extreme / catastrophic fire

Aspect	Purpose of monitoring	Monitoring	Frequency	Responsibility
Waste management	To monitor levels of waste on site.	Undertake weekly internal waste inspections.	Weekly during all stages	Stage 2a and 3a EPC Contractor Project Manager Stage 1b Operations Manager (GLC)
	To assess extent of waste hierarchy.	Carry out waste management audits.	Monthly during construction.	Stage 2a and 3a EPC Contractor Project Manager Stage 1b Operations Manager (GLC)
	Waste lifecycle.	Keep records of waste contractors and landfill facilities used to ensure waste management can be traced from cradle to grave.	Monthly	Stage 2a and 3a EPC Contractor Project Manager
	Ensure waste is collected at completion of construction.	Document the locations of stockpiled and stored waste.	One off (before activity)	Stage 2a and 3a EPC Contractor Project Manager
Waste classification	To ensure no waste disposed of contrary to its appropriate disposal classification	Checking that waste is stored in appropriately-labelled containers	Weekly	Stage 2a and 3a EPC Contractor Project Manager Stage 1b Operations Manager (GLC)
Waste Management Register	A Waste Management Register of all waste collected for disposal	Maintain and document data inputs for the Waste Management Register (i.e. the types and volumes of wastes generated, re-used, recycled and disposed of).	Monthly	Stage 2a and 3a EPC Contractor Project Manager

Aspect	Purpose of monitoring	Monitoring	Frequer	су	Responsibility
	and/or recycling will be maintained on a monthly basis until final completion.				Stage 1b Operations Manager (GLC)
Socio-economic environment					
Workforce	Accommodation and employment monitoring	 The monitoring program will specifically include: a review of workforce requirements, and ratio of local workforce to non-local workforce (once this has been established); a review of accommodation availability (including forward-looking bookings), utilisation and any actual or perceived impacts; consultation with Council, accommodation providers, and other stakeholders where required; a review of any relevant complaints and control measures; and a review of any impacts on the Strategy outside of ACENs control 	Every 6 month leading up to and during construction.	Mana	e 1b Operations Manager



APPENDIX E SECRETARY APPROVAL OF THIS PLAN



Sarah Donnan Project Manager – NES ACEN Australia 96b Bridge Street Uralla, NSW, 2358

22/12/2023

Subject: New England Solar – Environmental Management Strategy

Dear Mrs Donnan,

I refer to your submission requesting approval of the Environmental Management Strategy for Stage 1b, Stage 2a and Stage 3a (Revision 6 dated 15 December 2023). I also acknowledge your response to the Department's review comments and request for additional information.

The Department has carefully reviewed the document and is satisfied that it meets the requirements of the relevant conditions of consent (SSD-9255 as modified).

As nominee of the Planning Secretary, I approve the Environmental Management Strategy for Stage 1b, Stage 2a and Stage 3a (Revision 6 dated 15 December 2023).

Please ensure you make the document publicly available on the project website at the earliest convenience.

If you wish to discuss the matter further, please contact Katie Weekes on (02) 4927 3223 or via email at katie.weekes@dpie.nsw.gov.au.

Yours sincerely

Wayne Jones Team Leader - Post Approval Energy Assessments

As nominee of the Planning Secretary

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