PUBLIC



Staging Report EnergyConnect (NSW – Western Section) 45860-HSE-PL-D-0001

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Key Document Stakeholders

To be communicated with during reviews and revisions of this document



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Abbreviations and definitions

Acronym	Definition
AEMO	Australian Energy Market Operator
Amendment Report	EnergyConnect (NSW - Western Section) Amendment Report
AS/NZ	Australian Standard / New Zealand Standard
ВАМ	Biodiversity Assessment Method
BOS	Biodiversity Offset Strategy
CEMP	Construction Environmental Management Plan
CSSI	Critical State significant infrastructure
DAWE	Department of Agriculture, Water and Environment, now known as Department of Climate Change, Energy, the Environment and Water
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DPE	NSW Department of Planning and Environment, now known as NSW Department of Planning, Housing and Infrastructure
DPHI or Department	NSW Department of Planning, Housing and Infrastructure
DPIE	Department of Planning, Industry and Environment, now known as NSW Department of Planning, Housing and Infrastructure
EIS	EnergyConnect (NSW - Western) Environmental Impact Statement
EMF	Electromagnetic fields
EMS	Environmental Management System
EP&A Act	Environmental Planning and Assessment Act 1979
EPA	NSW Environment Protection Authority
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
EPL	Environment Protection Licence
ER	Environmental Representative
HMP	Heritage Management Plan
LGA	Local Government Area
km	Kilometre
kV	Kilovolt
NML	Noise Management Level
NSW	New South Wales
OEH	NSW Office of Environment and Heritage
OEMP	Operational Environmental Management Plan
PADs	Potential archaeological deposits
POEO Act	Protection of the Environment Operations Act 1997
project, the	EnergyConnect (NSW - Western Section)
RAPs	Registered Aboriginal Parties
Response to DPIE Request for Information	The 'additional information letter dated 10 August 2021' in the definition section of the Infrastructure Approval; document is also titled EnergyConnect (NSW - Western Section) Response to DPIE Request for Information - 7 May 2021 and subsequent discussions
RMMs	Revised mitigation measures



Acronym	Definition
SA	South Australia
SecureEnergy	Transgrid has engaged Elecnor Australia, trading as SecureEnergy, to design and construct the EnergyConnect project.
SSI	State significant infrastructure
Submissions Report	EnergyConnect (NSW - Western) Submissions Report



1 Introduction

1.1 Background

On 29 August 2019, the New South Wales (NSW) Minister for Planning and Public Spaces declared the NSW component of EnergyConnect to be critical State significant infrastructure (CSSI) under the *Environmental Planning and Assessment Act 1979* (EP&A Act) on the basis that it is critical to the State for environmental, economic or social reasons. Within NSW, EnergyConnect is therefore subject to assessment under Part 5, Division 5.2 of the EP&A Act.

Transgrid have two environmental planning approval applications for the sections within NSW:

- EnergyConnect (NSW Western Section) South Australia (SA)/NSW border to Buronga and Buronga to the NSW/Victorian border (the project); and
- EnergyConnect (NSW Eastern Section) Buronga to Wagga Wagga.

A referral under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) was submitted on 27 May 2020. The Australian Department of Agriculture, Water and the Environment (DAWE) determined the project to be a controlled action on 26 June 2020 and thus, it would be assessed using the bilateral assessment process. As such, the project also requires approval from the Australian Minister for the Environment under the EPBC Act.

The EnergyConnect (NSW - Western Section) Environmental Impact Statement (EIS) was prepared for the project in October 2020 and was placed on public exhibition from 30 October 2020 to 10 December 2020. A total of 20 submissions were received, with 15 from government agencies, three from organisations and two from the public.

The EnergyConnect (NSW - Western Section) Submissions Report (Submissions Report) was prepared for the project in response to the submissions received during the public exhibition of the EIS. The Submissions Report was finalised on 14 April 2021.

Transgrid also prepared a separate *EnergyConnect (NSW - Western Section) Amendment Report* (Amendment Report) to document design changes and additional environmental assessment undertaken since exhibition of the EIS. The Amendment Report was also finalised on 14 April 2021.

On 7 May 2021, the Department requested additional information (*EnergyConnect (NSW - Western Section) (SSI-10040) Request for Additional Information*) to assist with the assessment of the project. In response Transgrid prepared and provided the additional information letter dated 10 August 2021 (Response to DPE Request for Information), which included revised mitigation measures (RMMs) in Appendix G which are to be applied. The Response to DPE Request for Information was dated 10 August 2021.

Approval for the project under the EP&A Act was granted by the NSW Minister for Planning and Public Spaces (Infrastructure Approval SSI 10040) on 28 September 2021. Approval for the project under the EPBC Act was granted by the Australian Minister for the Environment.

Transgrid have engaged Elecnor Australia, trading as SecureEnergy, to design and construct their portion of the EnergyConnect project.

1.2 Purpose

This Staging Report has been prepared to describe the proposed staging of the construction phase of the EnergyConnect (NSW - Western Section) as permitted in condition E2 of the Infrastructure Approval.



This Staging Report has been prepared to provide detail on the application of the conditions of the Infrastructure Approval for each stage, and consequently, the submission of the post-approval documents which are required to be prepared

Table 1.1 - Conditions of Approva	al applicable to the	Staging Report
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Condition	Requirement	Where addressed
E2	 With the approval of the Planning Secretary, the Proponent may: a) prepare and submit any strategy, plan or program required by this approval on a staged basis (if a clear description is provided as to the specific stage and scope of the development to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program); b) combine any strategy, plan or program required by this approval (if a clear relationship is demonstrated between the strategies, plans or programs that are proposed to be combined); and c) update any strategy, plan or program required by this approval (to ensure the strategies, plans and programs required under this approval are updated on a regular basis and incorporate additional measures or amendments to improve the environmental performance of the development). If the Planning Secretary agrees, a strategy, plan or program may be staged or updated without consultation being undertaken with all parties required to be consulted in the relevant condition in this approval. If approved by the Planning Secretary, updated strategies, plans or program. If the Planning Secretary agrees, a strategy, plan or program may be staged without addressing particular requires the condition that requires the strategy, plan or program. 	This Staging Report has been prepared to describe the proposed staging for the construction phase of EnergyConnect (NSW- Western Section). Elecnor proposes to submit management plans required by the Infrastructure Approval in a staged basis as described in Section 4.2 and Appendix A. Further to this, Elecnor proposes to submit works as executed plans and undertake various other requirements identified in the Infrastructure Approval in a staged basis as described in Section 4.3 and Appendix A.

2 Project description

2.1 Overview of EnergyConnect

Transgrid and ElectraNet are currently constructing and will operate a new electrical interconnector and network support option between NSW and SA, with an additional connection to Red Cliffs in north-west Victoria. Collectively, the interconnector is known as EnergyConnect.

The interconnector is aimed at reducing the cost of providing secure and reliable electricity transmission between NSW and SA in the near term, while facilitating the transition of the energy sector across the National Electricity Market to low emission energy sources.

The preferred option involves constructing a new high voltage electricity interconnector, approximately 900km long, between the power grids of SA (starting at Robertstown) and NSW (finishing in Wagga Wagga). EnergyConnect comprises several sections (as shown on Figure 2.1), being:

- Victorian section, which extends from the NSW/Victoria border to an existing electricity facility at Red Cliffs;
- NSW sections including:
 - Western section (the subject area of this document) which extends from:
 - the SA/NSW border (near Chowilla in SA) to Buronga;
 - Buronga to the NSW/Victoria border at Monak (near Red Cliffs in Victoria);
 - Eastern section, which extends from Buronga to Wagga Wagga; and
- SA section, which extends from Robertstown to the SA/NSW border.



Figure 2.1 - Overview of EnergyConnect (WSP)



2.2 EnergyConnect (NSW - Western Section)

EnergyConnect (NSW - Western Section) will traverse from SA/NSW border (near Chowilla in SA) to Buronga, and Buronga to the NSW/Victoria border at Monak (near Red Cliffs in Victoria), a distance of approximately 160 kilometres (km). The NSW western section is situated within the Wentworth Local Government Area (LGA).

The key components for EnergyConnect (NSW - Western Section) include:

- approximately 135km of new transmission line and associated infrastructure between the SA/NSW border near Chowilla and the existing Buronga substation;
- upgrade of the existing, 24km long transmission line between the existing Buronga substation and the NSW/Victoria border at Monak, near Red Cliffs in Victoria;
- upgrade and expansion of the existing Buronga substation;
- minor realignment of the existing transmission line in proximity to the Darling River; and
- ancillary works required to facilitate the construction of the project (e.g. laydown and staging areas, concrete batching plants, earthworks material site; crushing and screening plant, brake/winch sites, site offices and accommodation camps).



3 Staging

3.1 Stage 1 - Construction

Stage 1 of construction is proposed to occur ahead of the main transmission line works in order to expedite the overall delivery program for EnergyConnect.

The Buronga substation is located on Arumpo Road in Buronga. The existing 220 kilovolt (kV) substation will be upgraded and expanded to a new 330kV substation on a land parcel adjacent to the existing 220kV substation. Refer to Figure 3.1 for the indicative disturbance area of Stage 1 of construction.

The key project components of Stage 1 of construction include, but are not limited to, the activities provided in Table 3.1.

Key activity	Description of key activity
Environmental investigations, including biodiversity and heritage protection, salvage and recordings.	These key activities nominated in this stage will have already commenced as part of the pre-construction minor works permitted in accordance with the Infrastructure Approval. The definition of 'construction' within the Infrastructure Approval excludes these activities. The weill therefore not be subject to the Stage 1 CEMB and CEMB sub-
Other survey work, such as road dilapidation surveys, and surveys of the general alignment and existing utilities.	plans.
Site establishment at Buronga substation upgrade and expansion site	 The main site establishment activities that would be undertaken at Buronga substation upgrade and expansion site include: clearing of vegetation within the disturbance area (including scrub, undergrowth and ground vegetation); clearing and removal of topsoil. Topsoil would be stockpiled on site for later reuse; establishing crushing and screening plants (if required), ancillary facilities, including but not limited to offices and amenities, and internal roads; and installing temporary fencing (including fencing around the site where required), signage and security measures as well as any necessary construction environmental management measures such as erosion and sediment controls.
Bulk earthworks at Buronga substation upgrade and expansion site	Bulk earthworks to form the Buronga substation pad which includes placement of around 350,000m3 of rock/gravel/soil from the earthworks material site to allow for the construction of the substation pad in preparation for concrete foundations. Crushing and screening activities may be required in order to meet the engineering requirements. Existing soil that does not meet engineering requirements for the substation pad will be temporary stockpiled.
Site establishment of the Buronga accommodation camp	The main activities that would be undertaken at Buronga construction compound and accommodation camp include:
Site establishment and operation of the Buronga construction compound	 clearing of vegetation within the disturbance area (including scrub, undergrowth and ground vegetation); clearing and removal of topsoil. Topsoil would be stockpiled on site for later reuse; establishing the accommodation camp and associated facilities, including but not limited to site offices, amenities, wastewater treatment plant, power generators, hazardous material and fuel storage area and internal roads; establishing and operating site offices and other ancillary facilities, including but not limited to and amenities, and internal roads; connections and pre-commissioning of on-site utilities (wastewater treatment plant, electrical power, lighting and etc.) for the construction compound and accommodation camps; and

Table 3.1 - Key project components of Stage 1 construction



Key activity	Description of key activity
	 installing temporary fencing, signage and security measures as well as any necessary construction environmental management measures such as erosion and sediment controls, where required.
Access points	The establishment of access points would include:
	 establishing vehicle access and egress points including adjustment of roads to ensure safe vehicle movements; and establishing truck wheel wash or rumble grids.
	The definition of construction within the Infrastructure Approval does not include road upgrades (which includes access points). Road upgrade works are, however, incorporated within the Traffic and Transport Management Plan as required by condition D40b).
Water supply points - establishment and/or use	 A series of water supply points have been identified as suitable connection points to existing water supply pipelines. The proposed water supply points which are to be established and/or used include: Alcheringa Drive; and
	Modica Crescent.
Utility adjustments and protection	General utility protection and adjustment works, where required, to allow for the Buronga substation expansion and upgrades works to occur, the establishment of the accommodation camp and the establishment and operation of the construction compound.



Figure 3.1 - Indicative disturbance area of Stage 1 of construction



3.2 Stage 2 - Construction

Stage 2 of construction would include all remaining works not completed in Stage 1. The key project components of Stage 2 of construction include, but are not limited to, the activities provided in Table 3.2.

Key activity	Description of key activity
Pre-construction minor works permitted in accordance with the Infrastructure Approval.	 The definition of 'construction' within the Infrastructure Approval excludes the following 'pre-construction minor works' activities. They will therefore not be subject to the Stage 2 CEMP and CEMP sub-plans. Irrespective of this, these activities will occur in accordance with the relevant conditions of the Infrastructure Approval. Key activities include: environmental investigations, including biodiversity and heritage protection, salvage and recordings; Aboriginal Cultural Heritage Assessment in accordance with condition D32. Activities included subsurface testing/test excavation, additional survey, and consultation with RAPs; other survey work, such as road dilapidation surveys, and surveys of the general alignment and existing utilities; installing temporary fencing, signage and security measures as well as any necessary construction environmental management measures such as erosion and sediment controls, where required; and connections and pre-commissioning of on-site utilities (wastewater treatment plant, electrical power, lighting and etc.) for the construction facilities.
Continuation of any outstanding Stage 1 construction activities	 Construction activities undertaken during Stage 1 of the project will continue where required. This includes, but is not limited to continuation of the following activities: outstanding construction earthworks activity at the Buronga substation; operation of the Buronga laydown area including the crushing and screening plant, where required; operation of the Buronga construction compound and associated facilities; and use of access and egress points.
Continuation of any outstanding Stage 1 construction activities	 Construction activities undertaken during Stage 1 of the project will continue where required. This includes, but is not limited to continuation of the following activities: outstanding construction earthworks activity at the Buronga substation; operation of the Buronga laydown area including the crushing and screening plant, where required; operation of the Buronga construction compound and associated facilities; and use of access and egress points.
Establishment of Wentworth accommodation camp	The main activities that would be undertaken at the Wentworth accommodation camp and construction compound and the Anabranch South ancillary
Establishment and operation of Wentworth construction compound Establishment and operation of Anabranch South ancillary construction site	 construction site includes: clearing of vegetation within the disturbance area; clearing and removal of topsoils. Topsoil would be stockpiled on site; establishing the Wentworth accommodation and associated facilities, site offices, amenities, wastewater treatment plant, power generators, hazardous material and fuel storage area, and internal roads; establishing and operating Wentworth construction including but not limited to amenities compound site offices, concrete batching plant, internal roads and other ancillary facilities; and



Key activity	Description of key activity
	 establishing and operating Anabranch South ancillary construction site laydown areas, vehicle and equipment storage, maintenance sheds, potential stockpile areas, demountable offices and parking.
Buronga substation upgrade and expansion	The existing Buronga 220kV substation would be upgraded and expanded to add a new 330kV substation on the land parcel adjacent to the existing 220kV substation. The upgrade and expansion of the Buronga substation would consist of the following key activities in addition to the works undertaken during Stage 2 of construction:
	Civil works including.
	- underground mesh installation (earthing grid);
	- foundation and footing works for the electrical equipment; and
	 Installation of the synchronous condenser (SynCon) building slab;
	mechanical works including:
	 erection of the SynCon, transformers, shunt reactor and capacitor banks;
	 installation of oil treatment;
	- gantry erection;
	 installation of electrical equipment;
	 installation of supporting steel structure;
	 overhead HV cables and cable pulling;
	 switchyard building installation (including control equipment); and
	 construction of the SynCon building;
	electrical works including:
	 LV cable pulling, cable dressing and terminations; and
	 outdoor installation of the lighting system.
Establishment other ancillary facilities on the transmission line construction corridor outside identified heritage risk zones	A number of minor staging, storage and laydown ancillary areas would be required within the project corridor for temporary storage of materials, plant and equipment required to construct the various elements of the proposal (in particular transmission line structures). Some temporary mobile batching plant locations may also need to be established to enable for easily access to concrete. Upon completion of works, these ancillary sites would be cleared of any temporary infrastructure and equipment, and rehabilitated. These sites would be in place for shorter periods at locations suitable to support the construction works
	as they move along the alignment.
Property adjustment work, including adjustments to property fencing	Installation or adjustment of gates and fences would be required at some locations along the alignment to enable access from the nearest roadway to construction areas. These would be constructed in consultation with the relevant council and/or affected landholder.
Water supply points - establishment and/or use	A series of water supply points have been identified as suitable connection points to existing water supply pipelines. The proposed water supply points which are to be established and / or used include:
	 Alcheringa Drive, Buronga; Modica Crescent, Buronga; Fletchers Lake Drive, Dareton; Beverley Street, Wentworth; and 690 Pomona Road, Pomona/Oxley Drive, Pomona.
Access points	The establishment of access points would include establishing vehicle access and egress points to ensure safe vehicle movements.
	The definition of construction within the Infrastructure Approval does not include road upgrades (which includes access points). Road upgrade works are, however, incorporated within the Traffic and Transport Management Plan as required by condition D40 b).



Key activity		Description of key activity				
Construction a	ccess tracks	Access to each tower would be required during construction. Access tracks would be required to be traversable by a range of vehicles. Access tracks would fall into two broad groups:				
		 un-improved access tracks - using existing roads or tracks, or driving on existing soil or ground surface with minimal or no prior preparation; and constructed access tracks - around six metres wide and would generally follow the natural contour of the land as far as practicable to minimise the amount of cut and fill and soil disturbance. Access tracks would also include drainage control features such as table drains or cross banks to minimise erosion. 				
		Constructed access tracks would be required in areas where there are no existing roads or tracks, or where terrain conditions prevent continuous access along the line easement between road crossings.				
Temporary wo	rks	The project will require a significant quantity of temporary works during construction. The temporary works will includes, but not limited to, the following:				
		 earthworks, including trenches, excavations, temporary slopes, stockpiles, and embankments; 				
		 structures, such as formwork, shoring, edge protection, temporary bridges, solid fencing/guardrails/barriers and signage, temporary scaffold; and equipment/plant foundations, such as work platforms, crane, and piling platforms. 				
Transmission line construction	Earthworks and transmission tower footing construction	Excavation works and establishment of construction pads at each tower site would be required for the installation of foundations, levelling around the individual tower foundations, drainage and grading or preparation for construction at the tower site. Excavations would typically be up to five metres in depth. Construction of footings and foundation works for the new transmission line towers includes:				
		 piling. Typical transmission line tower piling depth would be generally up to 6-15 metres below ground level and would depend on ground conditions (e.g. greater piling depths would be required where soft soil types are present). The foundation type would also vary (subject to detailed design) but would consist of either: 				
		 bored pile (reinforced concrete); 				
		- driven or screw pile (concrete or steel); and				
		 helical screw anchor, or cast in-situ reinforced concrete. 				
		 excavation to create bench sites (stepped ground excavation) where required to provide a level platform for equipment setup, the erection of the tower and other construction activities. Benching would be constructed by use of earthing equipment such as graders and excavators; steel fabrication works; and concrete pours. 				
	Assembly and erection of transmission line towers	The transmission line towers would typically be erected by assembling in sections on the ground and hoisting or lifting successive sections into place using cranes.				
		Alternatively, towers may be erected in place on the footings by installing individual members. These towers would include infrastructure such as step bolts, climbing attachment plates, ladders, platforms, climbing barriers, identification plates, warning plates, other fixtures and fittings for the attachment of earthwires and insulators.				
	Stringing of transmission lines including	Following erection and securing of the tower, the transmission line would be strung by either a ground pulled draw wire (with brake/winch sites) or a line stringing drone.				
	conductors and overhead earth wires and optical ground wire	The area required for the construction of each tower would require access for tower assembly and stringing works. Where a transmission tower is proposed to allow for a direction change of the transmission line, a larger area would be required (to allow for brake and winching sites). At a typical site, this would include a temporary area of up around 60 metres by 80 metres at each transmission line tower location.				



Key activity		Description of key activity
		Stringing of transmission line would also be required across the following three major watercourses:
		 the Great Darling Anabranch, Wentworth NSW; Darling River, Ellerslie NSW; and Murray River, Monak NSW / Red Cliffs Victoria.
		The general construction methodology is to assemble and erect a transmission line structure on either side of each major river crossing. A drone would then be used to take a lead wire over the river to allow cables to then be pulled and strung tower to tower.
	Installation of	The following key activities will be undertaken:
	earthing conductors	 installation of earthing conductors at each of the transmission tower arms; and installation of earthing or isolation sections of fences and gates where the transmission line crosses or closely runs parallels to a metallic fence.
Utility adjustm protection	ents and	Utility adjustments and protection Utility adjustment works would be required to convert several overhead distribution powerlines up to and including 66kV to underground cables.
		The existing alignment of the Broken Hill transmission line would require relocation at two locations. This would comprise of:
		 a permanent relocation of the existing transmission line in the vicinity of the Darling River. This would require the construction of two new monopoles, and the stringing of conductors/earth wires between the existing and new structures. The redundant tower would be decommissioned; and a temporary relocation of a section of the existing transmission line that currently passes through the existing Buronga substation. This would be temporarily relocated around 200 metres to the east of its current alignment (along the eastern boundary of the existing substation site). Once the construction works to upgrade the substation are completed, the alignment of the 220kV Broken Hill line would be restored in a location generally consistent with the original line location.
		General utility protection and adjustment works, where required, to allow for the Buronga substation expansion and upgrades works to occur, the establishment and operation of the construction compound and accommodation camps, and where else required.
Decommission	ning of existing	Decommissioning and removal of:
infrastructure		 the existing 220 kV transmission line between Buronga substation and the NSW / Victoria border; the temporary bypass transmission line infrastructure installed to allow construction of the new double circuit 220kV line; and a single tower on the existing 220kV Broken Hill line in the vicinity of the Darling River.
Testing and commissioning trials		 Testing and commissioning trials of equipment, and series of equipment/system, that allows the project to carry out the approved purpose per the Infrastructure Approval. This will include, but not limited to; High voltage electrical equipment (transformers, circuit breakers, synchronous condenser etc); Internetwork testing - Stage 1 (Series of tests and hold points with AEMO and ElectraNet) Once Stage 1 of Internetwork testing is successfully completed, ~150MW of load is able to flow in both directions between NSW and SA.
		3.3).



Key activity	Description of key activity
Progressive site rehabilitation and landscaping	Site rehabilitation would be carried out progressively along completed sections of the transmission line as well as the expanded substation site. These activities includes:
	 the remediation and landscaping of the completed transmission tower footprint; removal of redundant environmental controls within the transmission tower footprint; removal of temporary equipment and machinery; and installation of the permanent Transgrid property boundary fence surrounding the expanded substation site would also likely occur during this phase.

Stage 2 of construction will continue until all construction activities, including demobilisation of the accommodation camps and site-wide rehabilitation and landscaping is complete. There may be an overlap of Stage 2 of construction and the commencement of operation described in Section 3.3 and Section 3.4.

3.3 Operation (Line 1)

Operation (Line 1) involves the connection and energisation of Line 1, which extends from the SA/NSW border (near Chowilla in SA) to Buronga. Operation (Line 1) will also include the operation of a portion of the Buronga substation associated with Line 1 connections. The Buronga substation is located on Arumpo Road in Buronga. The existing 220 kilovolt (kV) substation is being upgraded and expanded to a new 330kV substation on a land parcel adjacent to the existing 220kV substation.

Commissioning trials of equipment and use of temporary facilities are within the definition of construction and are therefore excluded from the definition of operation. Project EnergyConnect will enter Operation (Line 1) after completion of Stage 1 of inter-network testing with the Australian Energy Market Operator (AEMO) and ElectraNet on Line 1.

The key project components of Operation (Line 1) include, but are not limited to, the activities provided in Table 3.3.

Key activity	Description of key activity
Maintenance	 Key activities include: Regular inspection (ground and aerial) and maintenance of electrical assets (transmission lines, towers and substation assets). General building, asset protection zone and general landscaping maintenance. Fire detection system inspection and maintenance. Fence, signage and gate maintenance and repair. Stormwater and drainage infrastructure maintenance. Easement vegetation maintenance. Access track maintenance. Maintenance works based on defects raised in inspections.
	Note: An Operational Environmental Management Plan (OEMP) will be submitted to DPHI for approval, per condition C1, prior to entering the 'Operation' phase. Further details of key activities will be provided within this document. The OEMP will cover both Operation (Line 1) and Operation (Line 4).

Table 3.3 - Operation (Line 1) works



3.4 Operation (Line 4)

Operation (Line 4) involves the operation of Line 4 and the portions of the Burgona substation associated with Line 4. Line 4 extends from Buronga to the NSW/Victoria border at Monak (near Red Cliffs in Victoria). Project EnergyConnect will enter Operation (Line 4) once the new circuit is connected and energised to the 220kV transmission line between Burgona substation and the NSW/Victoria border.

The key project components of Operation (Line 4) include, but are not limited to, the activities provided in Table 3.4.

Table	e 3.4	- Stag	je 2	operation	works
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Key activity	Description of key activity
Maintenance	 Key activities include: Regular inspection (ground and aerial) and maintenance of electrical assets (transmission lines, towers and substation assets). General building, asset protection zone and general landscaping maintenance. Fire detection system inspection and maintenance. Fence, signage and gate maintenance and repair. Stormwater and drainage infrastructure maintenance. Easement vegetation maintenance. Access track maintenance. Maintenance works based on defects raised in inspections.
	Note: An Operational Environmental Management Plan (OEMP) will be submitted to DPHI for approval, per condition C1, prior to entering the 'Operation' phase.
	Further details of key activities will be provided within this document. The OEMP will cover both Operation (Line 1) and Operation (Line 4).

3.5 Program

Construction activities commenced in July 2022 at the Buronga substation.

The construction of the transmission lines would take approximately 18 months. The Buronga substation upgrade and expansion would be delivered in two components associated with Operation (Line 1) and Operation (Line 4).

Operation (Line 4) is currently expected at the end of September 2024 to align with AusNet and PowerCor (Victoria) outages. If Operation (Line 4) does not occur at this time, Operation (Line 4) would align with the next available outage likely to be not until March/April 2025.

Operation (Line 1) is currently expected late 2024 / early 2025 after completion of Stage 1 of internetwork testing with the Australian Energy Market Operator (AEMO) and ElectraNet on Line 1.



4 Compliance

4.1 Conditions of Approval and revised mitigation measures

The applicability of the conditions and revised mitigation measures to each stage of the project has been identified in Appendix A and Appendix B, respectively. The allocations to each stage are described as:

- where a condition is relevant to a construction stage, it is considered **Applicable** and marked with a tick mark ([]) in the column for the relevant stage; and
- where a condition is not relevant to a construction stage, it is considered **Not Applicable**, and marked with the letter X (X) in the column for the relevant construction stage.

4.2 Submission of post-approval documents (Construction)

Table 4.1 outlines the submission of the post-approval documents for the different stages of construction.

	Stage 1 document	Stage 2 document	Includes all stages in one document
Management plans			
Construction Environmental Management Plan	\checkmark	~	
Traffic and Transport Management Plan	\checkmark	~	
Noise and Vibration Management Plan	\checkmark	✓	
Biodiversity Management Plan	\checkmark	✓	
Soil and Water Management Plan	\checkmark	~	
Heritage Management Plan	\checkmark	~	
Other documents required by the Approval			
Aboriginal Cultural Heritage Strategy	\checkmark	✓	
Traffic Strategy	\checkmark	\checkmark	
Accommodation Camp Management Plan			~
Emergency Plan			✓
Community Communications Strategy			✓
Local Business and Employment Strategy			✓
			~
Operational Noise Review			✓

Table 4.1 - Submission of post-approval documents

4.3 Submission of pre-operation documents

Table 4.2 outlines the pre-operation / post-construction documents for the different stages of operation.



Table 4.2 - Pre-operation requirements

Requirement (condition number)	Operation (Line 1)	Operation (Line 4)	Includes all stages in one document
Management plans			
Operational Environmental Management Plan (C1)			✓
Bird impact monitoring program (D28c)			✓
Other documents required by the Approval			
Local road dilapidation survey - completion of construction (D39)	\checkmark	~	
Notification of relevant local emergency management committee (D46f)	✓	~	
Notification to the Department (E3)	✓	~	
Works as executed plans (E5)	\checkmark	✓	

Appendix A - Application of Conditions of Approval for each stage of the project

Condition	Requirement	Construction		Operation		Comments
		Stage 1	Stage 2	Line 1	Line 4	
PART A -	ADMINISTRATIVE CONDITIONS					
Obligation	to Minimise Harm to the Environment					
A1	In meeting the specific performance measures and criteria of this approval, all reasonable and feasible measures must be implemented to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from the construction, operation, rehabilitation or decommissioning of the development.	~	~	~	✓	Applicable across all stages.
Terms of Ap	oproval					
A2	 The development may only be carried out: a) in compliance with the conditions of this approval; b) in accordance with all written directions of the Planning Secretary; c) generally in accordance with the EIS; and d) generally in accordance with the Development Layout in Appendix 1. 	V	1	V	×	Applicable across all stages.
A3	 The Proponent must comply with any requirement/s of the Planning Secretary arising from the Department's assessment of: a) any strategies, plans or correspondence that are submitted in accordance with this approval; b) any reports, reviews or audits commissioned by the Department regarding compliance with this approval; and c) the implementation of any actions or measures contained in these documents. 	~	~	V	~	Applicable across all stages.
A4	The conditions of this approval and directions of the Planning Secretary prevail to the extent of any inconsistency, ambiguity or conflict between them and a document listed in condition A2(c) or A2(d). In the event of an inconsistency, ambiguity or conflict between any of the documents listed in condition A2(c) or A2(d), the most recent document prevails to the extent of the inconsistency, ambiguity or conflict.	V	V	¥	×	Applicable across all stages.
A5	Any document that must be submitted within a timeframe specified in or under the terms of this approval may be submitted within a later timeframe agreed with the Planning Secretary. This condition does not apply to the immediate written notification required in respect of an incident under condition E6.	~	~	V	✓	Applicable across all stages.



Condition	Requirement	Construction		Operation		Comments
		Stage 1	Stage 2	Line 1	Line 4	
Lapse of Ap	proval					
A6	This approval will lapse if the Proponent does not physically commence the development within 5 years of the date on which it is granted.	\checkmark	~	√	~	Applicable across all stages.
Evidence of	Consultation					
A7	Where conditions of this approval require consultation with an identified party, the Proponent must:	√	~	~	√	Applicable across all stages.
	 a) consult with the relevant party prior to submitting the subject document to the Planning Secretary for approval; and 					
	b) provide details of the consultation undertaken including:					
	(i) the outcome of that consultation, matters resolved and unresolved; and					
	 details of any disagreement remaining between the party consulted and the Proponent and how the Proponent has addressed the matters not resolved. 					
Protection of	of Public Infrastructure					
A8	Unless the Proponent and the applicable authority agree otherwise, the Proponent must:	\checkmark	✓	✓	✓	Applicable across all
	 a) undertake any works on or in the vicinity of public infrastructure in consultation with the applicable public authority or service provider responsible for that public infrastructure; 					stages.
	b) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and					
	 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 any damage to roads caused as a result of general road usage which is expressly provided for in the conditions of this approval.					
Demolition						
А9	The Proponent must ensure that all demolition work on site is carried out in accordance with AS 2601-2001: The Demolition of Structures (Standards Australia, 2001).	X	~	Х	Х	No demolition is proposed as part of Stage 1 activities, nor during operation.



Condition	Requirement	Construction		Oper	ation	Comments
		Stage 1	Stage 2	Line 1	Line 4	
Structural A	dequacy					
A10	The Proponent 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 BCA; and where the BCA is not applicable, to the relevant Australian Standard.	✓	~	✓	~	Applicable across all stages.
	Notes:					
	 Under Part 6 of the EP&A Act, the Proponent 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.					
Compliance						
A11	The Proponent must ensure that all of its employees, contractors (and their sub- contractors) are made aware of, and are instructed to comply with, the conditions of this approval relevant to activities they carry out in respect of the development.	~	✓	✓	V	Applicable across all stages.
Operation o	of Plant and Equipment					
A12	All plant and equipment used on site, or in connection with the development, must be: maintained in a proper and efficient condition; and operated in a proper and efficient manner.	√	✓	✓	√	Applicable across all stages.
Applicability	y of Guidelines					
A13	References in the conditions of this approval to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of this approval.	√	✓	√	✓	Applicable across all stages.
A14	However, consistent with the conditions of this approval and without altering any limits or criteria in this approval, the Planning Secretary may, when issuing directions under this approval in respect of ongoing monitoring and management obligations, require compliance with an updated or revised version of such a guideline, protocol, Standard or policy, or a replacement of them.	~	✓	V	~	Applicable across all stages.



Condition	Requirement	Constr	uction	Oper	ation	Comments
		Stage 1	Stage 2	Line 1	Line 4	
Community	Communication Strategy					
A15	Prior to the commencement of construction, the Proponent must prepare a Community Communication Strategy to provide mechanisms to facilitate communication between the Proponent and the community (including adjoining affected landowners) during construction.	✓	~	Х	Х	Applicable across all construction stages.
	The Community Communication Strategy must:					
	a) identify landowners for potentially impacted receivers;					
	b) ensure that the landowners identified in (a) are consulted during construction;					
	 set out procedures and mechanisms for the regular distribution of information to the wider community; 					
	d) establish a public liaison officer(s) to engage with the local community; and					
	e) set out procedures and mechanisms:					
	 through which the community can discuss or provide feedback to the Proponent; 					
	 through which the Proponent will respond to enquiries or feedback from the community; and 					
	 to resolve any issues and mediate any disputes that may arise in relation to construction of the development. 					
	The Proponent must implement the Community Communication Strategy for the duration of construction.					
Environmer	ital Representative					
A16	Prior to commencing the development, an Environmental Representative (ER) must be approved by the Planning Secretary and engaged by the Proponent.	✓	~	Х	Х	Applicable across all construction stages.
A17	The Planning Secretary's approval of an ER must be sought no later than one (1) week before commencing the development.	✓	~	Х	Х	Applicable across all construction stages.
A18	The proposed ER must be a suitably qualified and experienced person who was not involved in the preparation of the documents listed in condition A2, and is independent from the design and construction of the development. The ER must meet only the requirements set out in section 2.2, 2.3,2.4 and 3 in the Environmental Representative Protocol (Department of Planning and Environment, October 2018).	✓	~	Х	Х	Applicable across all construction stages.



Condition	Requirement	Constr	uction	Operation		Comments
		Stage 1	Stage 2	Line 1	Line 4	
A19	From commencing the development, until commencing operation, or as agreed with the Planning Secretary, the approved ER must:	~	~	Х	Х	Applicable across all construction stages.
	a) review the documents identified in conditions A15, B1, B2, D3, D10, D11, D29, D37 D47, D52 and D53, and any other documents that are identified by the Planning Secretary, to ensure they are consistent with requirements in or under this approval and if so:					
	 make a written statement to this effect before submission of such documents to the Planning Secretary (if those documents are required to be approved by the Planning Secretary); or 					
	 (ii) make a written statement to this effect before the implementation of such documents (if those documents are required to be submitted to the Department for information or are not required to be submitted to the Department); 					
	 b) as may be requested by the Planning Secretary, assist the Department in the resolution of community complaints; and 					
	c) consider any minor amendments to be made to the plans / strategies in conditions A15, D11, D52, D53, E3, E4, E5, E6, E7 that involve updating or are of an administrative nature and do not increase impacts to nearby sensitive receivers, and ensure they are consistent with the terms of this approval and, if satisfied such amendment is necessary, approve the amendment. This does not include any modifications to the terms of this approval.					
A20	The Proponent must provide the ER with all documentation requested by the ER in order for the ER to perform their functions specified in condition A19, as well as the complaints register for any complaints received (on the day they are received).	V	~	Х	Х	Applicable across all construction stages.
PART B -	CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN					
Constructio	n Environmental Management Plan					
B1	Prior to the commencement of construction, a Construction Environmental Management Plan (CEMP) must be prepared to detail how the performance outcomes, commitments and mitigation measures specified in the EIS will be implemented and achieved during construction to the satisfaction of the Planning Secretary.	~	~	X	X	Applicable across all construction stages. Individual CEMPs will prepared for Stage 1
						and ∠.



Condition	Rec	luirement			Con	truction	Оре	ration	Comments
					Stage 1	Stage 2	Line 1	Line 4	
B2	The gov Tab	following CEMP Su ernment agencies id le 1: CEMP Sub-pla	(a) ✓ (b) ✓ (c) ✓	(a) ✓ (b) ✓ (c) ✓	Х	Х	All CEMP Sub- plans will be prepared for Stage 1 and 2.		
		Required CEMP Sub-plan	Relevant government agencies and stakeholders to be consulted for each CEMP Sub-plan		(d) ✓ (e) ✓	(d) ✓ (e) ✓			
	(a)	Noise and Vibration	Council						
	(b)	Soil and Water	DPIE Water Council						
	(C)	Biodiversity	BCS Council						
	(d)	Heritage	Heritage NSW Aboriginal stakeholders						
	(e)	Traffic and Transport	JfNSW Council						
B3	Det resu	ails of all information Ilt of consultation m	n requested by an agency to be in ust be provided with the relevant (cluded in a CEMP Sub-plan as a CEMP Sub-Plan.	~	✓	Х	Х	Applicable across all stages.
B4	Any sub	of the CEMP Sub-p mission of the CEMI	lans may be submitted along with, P but in any event prior to the com	, or subsequent to, the mencement of construction.	1	√	Х	Х	Applicable across all stages.
В5	Construction must not commence until the CEMP and all CEMP Sub-plans have been approved by the Planning Secretary. The CEMP and CEMP Sub-plans, as approved by the Planning Secretary, must be implemented for the duration of construction. Where construction of the development is staged, construction of a stage must not commence until the CEMP and sub-plans for that stage have been approved by the Planning Secretary				*	*	X	X	Applicable across all stages. Construction of the project will be staged in line with this Staging Report.
Manageme	nt Pla	n Requirements							



B6	The CEMP and CEMP Sub-plans required under this approval must be prepared by suitably qualified and experienced persons in accordance with relevant guidelines, and include where relevant:	✓	~	Х	Х	Applicable across all construction stages.
	a) a summary of relevant background or baseline data;					
	b) details of:					
	 the relevant statutory requirements (including any relevant approval or licence conditions); 					
	(ii) any relevant limits or performance measures and criteria; and					
	 (iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures; 					
	c) any relevant commitments or recommendations identified in the EIS;					
	 a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria; 					
	e) a program to monitor and report on the:					
	 (i) impacts and environmental performance of the development (including a table summarising all the monitoring and reporting obligations under the conditions of this approval); and 					
	(ii) effectiveness of the management measures set out pursuant to paragraph d);					
	 a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible; 					
	 g) a program to investigate and implement ways to improve the environmental performance of the development over time; 					
	h) a protocol for managing and reporting any:					
	 (i) incident, non-compliance or exceedance of any impact assessment criterion and performance criterion; 					
	(ii) complaint; or					
	(iii) failure to comply with other statutory requirements;					
	i) set out the procedures that would be implemented to:					
	 keep the local community and relevant agencies informed about the construction 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					



Condition	Requirement	Constr	uction	Оре	ration	Comments
		Stage 1	Stage 2	Line 1	Line 4	
	j) a description of the roles and environmental responsibilities, authority and accountability for all relevant employees, as well as training and awareness; and					
	k) a protocol for periodic review of the CEMP and associated Sub-plans and programs.					
	The Planning Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.					
Operationa	l Environmental Management Plan					
C1	An Operational Environmental Management Plan (OEMP) must be prepared to detail how the performance outcomes, commitments and mitigation measures made and identified in the EIS will be implemented and achieved during operation. This condition (condition C1) does not apply if condition C2 of this approval applies.	X	X	V	*	Applicable to the operational stage only. One OEMP will be prepared to consider both Operation (Line 1) and Operation (Line 4).
C2	An OEMP is not required for the development if the Proponent has an Environmental Management System (EMS) or equivalent as agreed with the Planning Secretary, and demonstrates, to the satisfaction of the Planning Secretary, that through the EMS:		Х	V	~	Applicable to the operational stage only. One OEMP will be
	a) the performance outcomes, commitments and mitigation measures, made and identified in the EIS, and specified relevant terms of this approval can be achieved;					prepared to consider both Operation (Line 1) and Operation (Line 4).
	b) issues identified through ongoing risk analysis can be managed;					
	 c) there is a clear plan depicting all the monitoring to be carried out in relation to the development, including a table summarising all the monitoring and reporting obligations under the conditions of this approval; 					
	d) there is a strategic framework for environmental management of the development;					
	 e) the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development is clear; and 					
	f) procedures are in place for:					
	 keeping the local community and relevant agencies informed about the operation and environmental performance of the development; 					
	 receiving, handling, responding to, and recording complaints; 					
	 resolving any disputes that may arise; 					
	 responding to any non-compliance; and 					
	responding to emergencies.					



Condition	Requirement	Constr	uction	Oper	ation	Comments
		Stage 1	Stage 2	Line 1	Line 4	
C3	Prior to the commencement of operations, the OEMP or EMS or equivalent as agreed with the Planning Secretary must be prepared to the satisfaction of Planning Secretary.	Х	Х	✓	¥	Applicable to the operational stage only. One OEMP will be prepared to consider both Operation (Line 1) and Operation (Line 4).
PART D - I	KEY ISSUE CONDITIONS					
Noise and V	<i>ibration</i>					
Construction	n Hours					
D1	Road upgrades, construction, upgrading or decommissioning activities may only be undertaken between: a) 7 am to 6 pm Monday to Friday;	✓	~	Х	Х	Applicable across all construction stages.
	b) 8 am to 1 pm Saturdays; and					
	 at no time on Sundays and NSW public holiday; unless the Planning Secretary agrees otherwise. 					
D2	The following construction, upgrading and decommissioning activities may be carried out outside the hours specified in condition D1 above:	\checkmark	~	Х	Х	Applicable across all construction stages.
	 the delivery or dispatch of materials as requested by the NSW Police Force or other public authorities for safety reasons; 					
	e) emergency work to avoid the loss of life, property or to prevent material harm to the environment; and					
	 works carried out in accordance with the hours and noise limits specified in any negotiated agreements with sensitive receivers (owners and occupiers), provided the negotiated agreements are in writing and finalised before the commencement of works. 					



Condition	Requirement	Constr	uction	Operation		Comments
		Stage 1	Stage 2	Line 1	Line 4	
D3	An Out-of-Hours Work Protocol must be prepared to identify a process for the consideration, management and approval of works which are outside the hours defined in conditions D1, D2, and D7 The Protocol must be approved by the Planning Secretary before commencing works. The Protocol must: a) be prepared in consultation with Council;	✓	~	Х	Х	Applicable across all construction stages.
	 provide a process for the consideration of out-of-hours works against the relevant noise and vibration criteria, including the determination of low and high-risk activities; 					
	 provide a process for the identification of mitigation measures for potential impacts, including respite periods in consultation with any affected receivers; 					
	 provide a process for the identification of out-of-hours works undertaken by third parties in the vicinity of the site, and coordination of out-of-hours works with these third parties to achieve respite periods in locations where receivers may be affected by concurrent activities; 					
	 e) identify an approval process that considers the risk of activities, proposed mitigation, management, and coordination, including where: 					
	 low risk activities can be undertaken without the approval of the Planning Secretary and with the approval of the ER; and 					
	 high risk activities that are approved by the Planning Secretary; and 					
	 f) identify Department, Council and community notification arrangements for approved out of hours work. 					
Constructio	n and Decommissioning					
D4	The Proponent must take all reasonable and feasible steps to minimise the construction, upgrading or decommissioning noise of the development in the locations where the noise is audible to sensitive receivers, including any associated traffic noise.	✓	V	Х	Х	Applicable across all construction stages.
D5	The Proponent must implement mitigation measures:	\checkmark	✓	Х	Х	Applicable across all
	 a) to ensure that the noise generated by any construction, upgrading or decommissioning activities is managed in accordance with the requirements for construction 'noise affected' management levels established in accordance with Interim Construction Noise Guideline (DECC, 2009); and 					construction stages.
	b) with the aim of achieving the road traffic noise assessment criteria for residential land uses from NSW Road Noise Policy (DECCW, 2011).					



Condition	Requiren	nent				Constr	uction	Operation		Comments
						Stage 1	Stage 2	Line 1	Line 4	
D6	 The Proponent must comply with the following vibration limits: a) vibration criteria established using the Assessing vibration: a technical guideline (DEC, 2006) (for human exposure); b) BS 7385 Part 2-1993 "Evaluation and measurement for vibration in buildings Part 2" as they are "applicable to Australian conditions"; and c) vibration limits set out in the German Standard DIN 4150-3: Structural Vibration-effects of vibration on structures (for structural damage). 					Ý	×	Х	X	Applicable across all construction stages.
D7	Blasting may only be carried out on the site between 9 am and 5 pm Monday to Friday and between 9 am to 1 pm on Saturday. No blasting is allowed on Sundays or public holidays.					Х	X	Х	Х	Blasting is not proposed for the project.
D8	The Prope criteria in Table 2: E	onent must en Table 2. Blasting criteria	sure that any	/ blasting carried out on th	ne site does not exceed the	Х	Х	X X	Х	Blasting is not proposed for the project.
	Location	Airblast overpressure (dB(Lin Peak))	Ground vibrations (mm/s)	Allowable exceedance						
	Any non-	120	10	0%						
	residence	115	5	5% of the total number of blasts or events over the rolling period of 12 months						
Operation	I									
D9	The Proponent must implement all reasonable and feasible measures with the aim of ensuring that the noise generated by the operation of the development does not exceed 40 dB(A) LAeq,15min, at the reasonably most affected point of the residence, in accordance with the NSW Noise Policy for Industry (EPA, 2017) at any non-associated residence.					Х	X	~	~	Applicable to the operational stage only.



Condition	Requirement	Constr	nstruction Operation		ration	Comments
		Stage 1	Stage 2	Line 1	Line 4	
D10	Within 12 months of the date of this approval, the Proponent must prepare an Operational Noise Review to confirm noise predictions and control measures that would be implemented for the operation of the development. The Review must:	~	~	V	~	Applicable across all stages.
	 a) be prepared by a suitably qualified and experienced person whose appointment has been endorsed by the Planning Secretary; 					
	b) be prepared in consultation with the landowner of impacted residences;					
	 c) identify residences predicted to experience noise levels that exceed 40 dB(A) LAeq,15min at the reasonably most affected point of the residence, determined in accordance with the NSW Noise Policy for Industry (EPA, 2017); 					
	d) detail the noise mitigation measures to achieve the noise criteria identified, including the timing of implementation;					
	e) provide evidence of consultation with affected landowners;					
	 f) include a consultation strategy to seek feedback from directly affected landowners on the noise mitigation measures; and 					
	g) identify procedures for the management of operational noise complaints.					
	The Proponent must implement any identified mitigation measures prior to the commencement of operation.					
Operationa	I Noise Monitoring					
D11	Within 6 months of the commencement of operations (or the commencement of operation of a stage, if the development is to be staged), the Proponent must:	Х	Х	~	√	Applicable across all operation stages.
	 a) undertake noise monitoring to determine whether the development is complying with the relevant conditions of this approval; and 					
	b) submit a copy of the monitoring results to the Department.					
D12	The Proponent must undertake further noise monitoring of the development if required by the Planning Secretary.	Х	Х	~	✓	Applicable across all operation stages.



Condition	Requirement	Constr	uction	Oper	ation	Comments
		Stage 1	Stage 2	Line 1	Line 4	
Noise and V	/ibration CEMP Sub-Plan					
D13	 The Noise and Vibration CEMP Sub-Plan required under condition B2 must: a) ensure the requirements in conditions D1 to D12 are complied with; b) include a description of the reasonable and feasible measures that would be implemented to minimise noise and vibration impacts of the development; c) include a detailed description of the noise and vibration management system for the development; d) include a protocol for the identification, notification and management of works that exceed the noise management levels; and e) include a monitoring program that evaluates and reports on the effectiveness of the noise and vibration management system. 	V	×	Х	X	Applicable across all construction stages.
Air Quality						
D14	In addition to the performance outcomes, commitments and mitigation measures specified in the EIS, the Proponent must take all reasonable steps to: a) minimise the off-site dust, fume, blast emissions and other air pollutants of the	√	1	√	~	Applicable across all stages.
	development; and					
	b) minimise the surface disturbance of the site.					
Soil and Wa	ater					
Water Supp	bly					
D15	The Proponent must ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of the development to match its available water supply.	✓	~	\checkmark	✓	Applicable across all stages.
	is required to obtain the necessary water licences for the development.					
Erosion and	Sedimentation					
D16	 The Proponent must: a) minimise erosion and control sediment generation; and b) ensure all land disturbances have appropriate drainage and erosion and sediment controls designed, installed and maintained in accordance with Managing Urban Stormwater - Soils and Construction Volume 1 (Landcom, 2004) and Managing 	V	~	✓	1	Applicable across all stages.
	2008);					



Condition	Requirement	Constr	uction	Оре	ration	Comments
		Stage 1	Stage 2	Line 1	Line 4	
Pollution of	Waters					
D17	Unless otherwise authorised by an EPL, the Proponent must ensure the development does not cause any water pollution, as defined under Section 120 of the POEO Act.	✓	~	✓	~	Applicable across all stages.
D18	 The Proponent must: a) ensure that appropriate components of the concrete batching plants and substation are suitably bunded; and b) minimise any spills of hazardous materials or hydrocarbons, and clean up any spills as soon as possible after they occur. 	✓ (b) only	✓ (a) and (b)	✓ (b) only	✓ (b) only	Applicable across all stages. No batching plants are proposed as part of the Stage 1 activities or as part of operation.
D19	The Proponent must ensure that any groundwater dewatering activities do not discharge to watercourses.	Х	V	Х	Х	Groundwater dewatering activities are not proposed as part of Stage 1 works or as part of operation.
Riparian Are	Pas					
D20	 The Proponent must ensure: a) all activities on waterfront land are constructed in accordance with the Guidelines for Controlled Activities on Waterfront Land (2012), unless DPIE Water agrees otherwise; and b) the geomorphic condition of the major rivers and distributary channels crossed by the development is not impacted. 	Х	~	Х	X	No waterway crossings are proposed as part of Stage 1 activities or as part of operation.
Flooding						
D21	 The Proponent must ensure that the development: a) does not materially alter the flood storage capacity, flows or characteristics in the development area or off-site; and b) is designed, constructed and maintained to reduce impacts on surface water, localised flooding and groundwater at the site, unless otherwise agreed by Council. 	✓ (a) only	✓ (a) and (b)	✓ (b) only	✓ (b) only	The Stage 1 disturbance area is not identified as flood prone land. Maintenance activities are required during the operation stages.



Condition	Requirement	Construction		Operation		Comments
		Stage 1	Stage 2	Line 1	Line 4	
Acid Sulfate Soils						
D22	The Proponent must ensure that any construction activities in identified areas of acid sulfate soil risk are undertaken in accordance with the Acid Sulfate Soil Manual (Acid Sulfate Soil Management Advisory Committee, 1998).	Х	Ý	X	X	Stage 1 of construction disturbance area is not identified as acid sulfate soil risk prone area. No construction activities are proposed
						during operation.
Salinity						
D23	The Proponent must ensure that any construction activities in identified areas of moderate to high salinity are undertaken in accordance with the Salinity Training Manual (DPI, 2014) and Book 4 Dryland Salinity: Productive use of Saline Land and Water (NSW DECC, 2008).	~	~	Х	Х	Applicable across all construction stages.
Soil and Water CEMP Sub-Plan						
D24	 The Soil and Water CEMP Sub-Plan required under condition B2 must include provisions for: a) ensuring the requirements in conditions D15 to D23 are complied with; b) managing flood risk during construction; c) investigating, assessing and managing contaminated land, soils and groundwater in the development area; d) investigating, assessing and managing the potential for asbestos and other hazardous materials in the development area; and e) managing any unexpected and / or suspected contaminated land, asbestos and unexploded ordinance excavated, disturbed or otherwise discovered during construction. 	~	×	X	X	Applicable across all construction stages. Two separate Soil and Water Management Plans will be prepared; one to consider Stage 1 activities, and one to consider Stage 2 activities.



Condition	rement Construction		uction	Operation		Comments
		Stage 1	Stage 2	Line 1	Line 4	
Biodiversity						
Restrictions on Clearing and Habitat						
D25	Unless otherwise agreed with the Planning Secretary, the Proponent must:	✓	✓	✓	~	Applicable across all
	a) ensure that no more than:					stages.
	 19.6 hectares (ha) of BC Act listed Sandhill Pine Woodland in the Riverina, Murray- Darling Depression and NSW Southwestern Slopes bioregions; 					
	 0.04 ha of habitat for BC Act listed flora species Acacia acanthoclada (Harrow Wattle); 					
	 0.32 ha of habitat for BC Act and EPBC Act listed flora species Atriplex infrequens (A saltbush); 					
	 1.51 ha of habitat for BC Act listed flora species Austrostipa nullanulla (A spear-grass); 					
	 14 individuals of BC Act listed Santalum murrayanum (Bitter Quandong); and 					
	 6.91 ha of habitat for BC Act and EPBC Act listed fauna species Polytelis anthopeplus monarchoides (Regent Parrot) (eastern subspecies); 					
	is cleared for the development; and					
	b) minimise:					
	 the impacts of the development on hollow-bearing trees 					
	 the impacts of the development on threatened bird and bat populations; and 					
	• the clearing of native vegetation and key habitat.					


Condition	Requirement	Construction		Operation		Comments
		Stage 1	Stage 2	Line 1	Line 4	
Biodiversity	Biodiversity Offset Package					
D26	Prior to carrying out any development that would impact on biodiversity values, the Proponent must prepare a Biodiversity Offset Package (Package) that is consistent with the EIS, in consultation with BCS and to the satisfaction of the Secretary in writing. The Package must include, but not necessarily be limited to:	✓	~	~	✓	Applicable across all stages.
	 a) details of the specific biodiversity offset measures to be implemented and delivered in accordance with the EIS; 					
	 b) the cost for each specific biodiversity offset measure, which would be required to be paid into the Biodiversity Conservation Fund if the relevant measure is not implemented and delivered (as calculated in accordance with Division 6 of the Biodiversity Conservation Act 2016 (NSW) and the offsets payment calculator that was established as at 29 July 2021); 					
	c) the timing and responsibilities for the implementation and delivery of the measures required in the Package; and					
	 confirmation that the biodiversity offset measures will have been implemented and delivered no later than 31 December 2023. 					
	Following approval, the Proponent must implement and deliver the Biodiversity Offset Package.					
D27	Prior to carrying out any development that could impact the biodiversity values requiring offset, the Proponent must establish an escrow account and pay into that account \$48 million, in accordance with the Deed of Agreement with the Planning Secretary executed on 13 September 2021. The Proponent must comply with the terms of the Deed.	✓	×	Х	Х	Transgrid will establish an escrow account prior to stage 1 activities.
	Note: this condition provides security to the Minister for the performance of the Proponent's obligations under this approval in relation to biodiversity offsets and release funds for payment into the Biodiversity Conservation Trust in the event that the biodiversity offsets (either in whole or part) are not delivered in accordance with the Package by the Proponent.					



Condition	Requirement	Construction		Operation		Comments
		Stage 1	Stage 2	Line 1	Line 4	
Biodiversity	CEMP Sub-Plan					
D28	 The Biodiversity CEMP Sub-Plan required under condition B2 must include: a) a description of the measures that would be implemented for: minimising the amount of native vegetation clearing within the approved development footprint; minimising the loss of key fauna habitat, including tree hollows; minimising the impacts on fauna on site, including undertaking preclearance surveys; minimising the potential indirect impacts on threatened flora and fauna species, migratory species and 'at risk' species; rehabilitating and revegetating disturbance areas; protecting native vegetation and key fauna habitat outside the approved disturbance area; maximising the salvage of resources within the approved disturbance area - including vegetative and soil resources - for beneficial reuse (such as fauna habitat enhancement) during the rehabilitation and revegetation of the site; collecting and propagating seed (where relevant); controlling veeds; controlling erosion; and b) details of the Proponent's commitment to make a one off \$150,000 funding contribution targeted at further scientific study into the impacts of electric and magnetic fields on birds in Australia; c) preparation and implementation of a two year bird impact monitoring program at the commencement of operations; and d) a detailed program to monitor and report on the effectiveness of these measures. 			√ (c) only	√ (c) only	Biodiversity CEMP Sub-Plan will be prepared for Stage 1 and 2 only. A bird impact monitoring program will be prepared to consider Operation (Line 1) and Operation (Line 4)combined.



Condition	Requirement	Construction		Operation		Comments
		Stage 1	Stage 2	Line 1	Line 4	
Heritage						
Heritage D29	 Prior to commencing construction, the Proponent must provide an Aboriginal Cultural Heritage Strategy, prepared in consultation with the Aboriginal stakeholders and Heritage NSW, to the satisfaction of the Planning Secretary. The Strategy must: a) identify any additional risk zones outside the potential archaeological deposits (PADs) where construction must not commence until subsurface testing in b) and surveys in c) are complete; b) describe additional subsurface testing that will be undertaken to confirm the significance of the PADs that would be impacted by the final transmission infrastructure design and ancillary facilities in line with the Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (DECCW, 2010); c) describe additional Aboriginal heritage surveys that will be undertaken where ground disturbance activities are required outside of the heritage survey area; d) include details of ongoing consultation with the Aboriginal stakeholders, including any written responses and records of any meetings; and e) include an updated Aboriginal cultural heritage assessment report, which: is based on the findings of the subsurface testing in b) and surveys in c); describes any potential additional impacts to heritage items; identifies further mitigation measures, including avoidance or salvage; includes detailed justification where the final transmission line alignment is not able to avoid impacts to heritage items; and 			X	X	Applicable across all construction stages. The Aboriginal Cultural Heritage Strategy will be staged in accordance with condition E2 to address condition D29 a) only in the first instance. Construction will not commence in any identified risk zones until the relevant subsurface testing or survey is undertaken as required by condition D29 b) or D29 c), as required.
Avoidance	and Salvage					
D30	The Proponent must implement all reasonable and feasible measures to avoid and minimise harm to heritage items and potential archaeological deposits (PADs) identified in the EIS and the Aboriginal Cultural Heritage Strategy required by condition D29, prior to carrying out any development that could harm the items or deposits.	4	V	Х	Х	Applicable across all construction stages.
D31	The Proponent must ensure the development does not cause any harm to heritage items identified for avoidance in the approved Aboriginal Cultural Heritage Strategy or any Aboriginal heritage items located outside the approved development footprint.	✓	V	Х	Х	Applicable across all construction stages.



Condition	Requirement	Construction		Construction Operatio		Comments
		Stage 1	Stage 2	Line 1	Line 4	
D32	Prior to carrying out any activity that could harm heritage items, the Proponent must salvage and relocate all heritage items identified for salvage and relocation in the updated and approved Aboriginal Cultural Heritage Strategy to a suitable alternative location, in accordance with the Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (DECCW, 2010).	Х	Ý	Х	Х	No Aboriginal heritage objects that would require salvage and relocation have been identified within the Stage 1 of construction disturbance area.
D33	The Proponent must ensure the development does not cause any harm to heritage items PEC-W- H-1 and PEC-W-SE-H1.	Х	~	~	~	No works associated with Stage 1 of construction will impact PEC-W-H-1 or PEC-W-SE-H1.



Condition	Requirement	Construction		Operation		Comments
		Stage 1	Stage 2	Line 1	Line 4	
Heritage CE	Heritage CEMP Sub-Plan					
D34	The Heritage CEMP Sub-Plan required under condition B2 must:	\checkmark	✓	Х	Х	Applicable across all
	a) be prepared by a suitably qualified and experienced person whose appointment has been endorsed by the Planning Secretary;					construction stages.
	b) include a description of the measures that would be implemented for:					
	 addressing the outcomes of the additional assessment, testing and surveys identified in condition D29; 					
	 protecting the heritage items identified in conditions D31 and D33, including fencing off the heritage items (where required) prior to carrying out any development that could harm the heritage items, and protecting any items located outside the approved development corridor; 					
	 salvaging and relocating the heritage items identified in condition D32; 					
	 minimising and managing the impacts of the development on heritage items within the development corridor, including: 					
	 a strategy for the long-term management of any heritage items or material collected during the test excavation or salvage works; 					
	• a contingency plan and reporting procedure if:					
	 heritage items outside the approved disturbance area are damaged; 					
	 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; and 					
	c) include a program to monitor and report on the effectiveness of these measures and any heritage impacts of the development.					



Condition Requirement		Construction		Operation		Comments
		Stage 1	Stage 2	Line 1	Line 4	
Traffic and Transport						
Designated Heavy and Over-Dimensional Vehicle Routes						
D35	 All over-dimensional vehicles associated with the development must only travel to and from the site via the Primary Access Routes described in the EIS, as identified in the figure in Appendix 2, unless the Planning Secretary agrees otherwise. Notes: The Proponent is required to obtain relevant permits under the Heavy Vehicle National Law (NSW) for the use of over-dimensional vehicles on the road network. 	✓	1	V	1	Applicable across all stages.
D36	 All heavy and light vehicles associated with the development: a) must travel to and from the site via the Primary Access Route described in the EIS, as identified in the figure in Appendix 2; and b) may travel to and from the site via the Secondary Access Routes and Water Supply Routes, subject to the requirements in conditions D37 and D38, to the satisfaction of the relevant roads authority, unless the Planning Secretary agrees otherwise. 	~	~	~	~	Applicable across all stages.



Condition	Requirement	Construction		Оре	eration Comments	
		Stage 1	Stage 2	Line 1	Line 4	
Traffic Strategy						
D37	Prior to commencing construction, the Proponent must prepare a Traffic Strategy, in consultation with the relevant roads authority, to the satisfaction of the Planning Secretary, which:	√	~	Х	Х	Applicable across all construction stages.
	a) for all access routes:					
	 identifies the location and type of any necessary road upgrades (including roads, intersections, crossing points and access points), including consideration of relevant amenity impacts; 					
	 ensures that any road upgrades comply with the Austroads Guide to Road Design (as amended by TfNSW supplements), unless the relevant roads authority agrees otherwise; 					
	 includes a detailed assessment of potential impacts of any necessary road upgrades (such as heritage and biodiversity impacts), including consideration of appropriate mitigation measures; 					
	 identifies whether intersections, crossing points and access points would be permanent or temporary; and 					
	 includes measures for notifying, seeking feedback from and addressing the concerns of impacted residents along the routes; 					
	b) for Secondary Access Routes and Water Supply Routes:					
	 provides detailed usage of the routes, including maximum daily numbers of heavy and light vehicles and approximate durations of use; 					
	 includes an assessment of dust impacts to any residences along the routes and identifies mitigation measures to minimise any impacts; and 					
	 identifies any residences along the routes that would experience road traffic noise above the relevant assessment criteria from Table 3 in NSW Road Noise Policy (DECCW, 2011) due to project-related traffic and identifies mitigation measures to minimise impacts. 					
D38	Prior to commencing construction, the proponent must implement the road upgrades and the mitigation measures identified in the Traffic Strategy in condition D37, to the satisfaction of the relevant roads authority and the Planning Secretary, respectively.	~	√	X	X	Applicable across all construction stages.



Condition	Requirement	Construction		on Operation		Comments
		Stage 1	Stage 2	Line 1	Line 4	
Road Mainte	enance					
D39	 The Proponent must: a) undertake an independent dilapidation survey to assess the: existing condition of all local roads on the transport route (including local road crossings) prior to construction, upgrading or decommissioning works; and condition of all local roads on the transport route (including local road crossings): within 1 month of the completion of construction, upgrading or decommissioning works, or within a timeframe agreed to by the relevant roads authority; on an annual basis during construction, or within a timeframe agreed to by the relevant roads authority; b) repair (or pay the full costs associated with repairing) any damage to local roads on the transport route (including local road crossings), if dilapidation surveys identify that the road has been damaged by the development during construction, upgrading or decommissioning works; in consultation with the relevant roads authority, to the satisfaction of the Planning Secretary. 	•		 ✓ (annual until within 1 month of completio n of constructi on, unless otherwise agreed by the relevant roads authority) 	 ✓ (annual until within 1 month of completio n of constructi on, unless otherwise agreed by the relevant roads authority) 	Applicable during construction.
D40	 The Traffic and Transport CEMP Sub-Plan required under condition B2 must include: a) details of the transport route to be used for all development-related traffic; b) details of the road upgrade works required by condition D38 of this approval; c) details of the measures that would be implemented to: minimise traffic safety impacts of the development and disruptions to local road users during construction, upgrading or decommissioning works, including: a description of the proposed dilapidation surveys required by condition D39 of this approval; a description of the proposed measures for managing traffic flow around the work sites, construction compounds and accommodation camps; temporary traffic controls, including detours and signage; 	✓	Image: A state of the state	X	X	Applicable across all construction stages.



Condition	Requirement		Construction		Operation		Comments
			Stage 1	Stage 2	Line 1	Line 4	
	-	procedures for stringing cables and transmission lines across roads;					
	-	notifying the local community about development-related traffic impacts;					
	-	procedures for receiving and addressing complaints from the community about development- related traffic;					
	-	minimising potential cumulative traffic impacts with other projects in the area;					
	-	minimising potential conflict between development-related traffic and rail services, stock movements and school buses, in consultation with local schools, including preventing queuing on the public road network;					
	-	implementing measures to minimise development-related traffic on the public road network outside of standard construction hours;					
	-	minimising dirt tracked onto the public road network from development-related traffic;					
	-	details of the employee shuttle bus service (if proposed), including pick-up and drop-off points and associated parking arrangements for construction workers, and measures to encourage employee use of this service;					
	-	encouraging car-pooling or ride sharing by employees;					
	-	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;					
	-	ensuring loaded vehicles entering or leaving the site have their loads covered or contained;					
	-	responding to any emergency repair or maintenance requirements;					
	-	provisions for maintaining emergency vehicle access at all times;					
	-	a traffic management system for managing over-dimensional vehicles; and					
	-	fatigue management.					
	• co	mply with the traffic conditions in this approval;					
	d) include a d	rivers code of conduct that addresses:					
	• tra	velling speeds;					



Condition	Requirement	Construction		Operation		Comments
		Stage 1	Stage 2	Line 1	Line 4	
	 procedures to ensure that drivers to and from the development adhere to the designated over dimensional and heavy vehicle routes; 					
	 procedures to ensure that drivers to and from the development implement safe driving practices; and 					
	 include a detailed program to monitor and report on the effectiveness of these measures and the code of conduct; and 					
	e) flood response plan detailing procedures and options for safe access to and from the site in the event of flooding.					
Visual Amer	nity					
Visual Impa	ct Mitigation					
D41	Unless the Planning Secretary agrees otherwise, for a period of 2 years from the commencement of operations, the owners of R1489, R2022 and R2023 may ask the Proponent to implement visual impact mitigation measures on their land to minimise the visual impacts of the development on their residence (including its curtilage).	Х	~	~	V	Nominated receivers are visually affected by activities undertaken in Stage 2 of
	Upon receiving such a written request from the owner of these residences, the Proponent must implement appropriate mitigation measures (such as landscaping and vegetation screening) in consultation with the owner.					construction. Applicable across all operation stages.
	These mitigation measures must be reasonable and feasible, aimed at reducing the visibility of the transmission line and towers from the residence and its curtilage, and commensurate with the level of visual impact on the residence.					
	All agreed mitigation measures must be implemented within 12 months of receiving the written request, unless the Planning Secretary agrees otherwise.					
	If the Proponent and the owner 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 Planning Secretary for resolution.					
	To avoid any doubt, mitigation measures are not required to be implemented to reduce the visibility of transmission lines and towers from any other locations on the property other than the residence and its curtilage.					
Visual Appe	earance					
D42	The Proponent must:	\checkmark	✓	✓	✓	Applicable across all
	a) take reasonable steps to minimise the off-site visual impacts of the development; and					stages.
	 b) not mount any advertising signs or logos on site, except where this is required for identification or safety purposes. 					



Condition	Requirement	Construction		Operation		Comments
		Stage 1	Stage 2	Line 1	Line 4	
Lighting						
D43	The Proponent must:	~	~	✓	\checkmark	Applicable across all
	 take all reasonable steps to minimise the off-site lighting impacts of the development; and 					stages.
	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. 					
Hazard and	Risk					
Dangerous	Goods					
D44	The Proponent must ensure that the storage, handling, and transport of dangerous goods is undertaken in accordance with the relevant Australian Standards and guidelines, particularly AS1940 The storage and handling of flammable and combustible liquids and AS/NZS 1596:2014 The storage and handling of LP Gas, the Dangerous Goods Code, and the EPA's Storing and Handling of Liquids: Environmental Protection – Participants Manual.	V	V	~	V	Applicable across all stages.
Electric and	Magnetic Fields					
D45	The Proponent must ensure that the design, construction and operation of the development is managed to comply with the applicable electric and magnetic fields (EMF) limits in the International Commission on Non Ionizing Radiation Protection (ICNIRP) Guidelines for limiting exposure to time-varying electric and magnetic fields (1Hz - 100kHz) (ICNIRP, 2010).	~	~	~	~	Applicable across all stages.



Condition	Requirement	Construction		Operation		Comments
		Stage 1	Stage 2	Line 1	Line 4	
Bushfire Sat	fety					
Operating Conditions						
D46	 The Proponent must: a) minimise the fire risks of the development, including managing vegetation fuel loads on-site; b) ensure that the development: 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 65 mm Storz fitting and a FRNSW compatible suction connection located at each of the construction compounds and accommodation camps; incorporates the recommendations of a fire risk assessment as per TransGrid's design standards; c) ensure that buildings within the compounds and accommodation camps comply with Australian Standard AS3959-2018 Construction of buildings in bushfire-prone areas (or equivalent) and RFS's Planning for Bushfire Protection 2019; d) develop procedures to manage potential fires on site, in consultation with the RFS and FRNSW; e) assist the RFS, FRNSW and emergency services as much as practicable if there is a fire in the vicinity of the site; and f) notify the relevant local emergency management committee following construction of the development, and prior to commencing operations. 		✓	~	*	Applicable across all stages. Separate notifications in accordance with condition D46f) will be undertaken for both Operation (Line 1) and Operation (Line 4).
Emergency	Plan					
D47	 Prior to commencing construction, the Proponent must develop and implement a comprehensive Emergency Plan and detailed emergency procedures for the development, in consultation with the local Fire Control Centre, and provide a copy of the plan to the local Fire Control Centre. The Proponent must keep two copies of the plan on-site in a prominent position adjacent to the site entry point(s) to the Buronga Substation at all times. The plan must: a) be consistent with: RFS's Planning for Bushfire Protection 2019 (or equivalent); 	~	~	X	X	Applicable across all construction stages.



Condition	Requirement	Construction		Operation		Comments
		Stage 1	Stage 2	Line 1	Line 4	
	 RFS's Development Planning - A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan; 					
	• the Fire and Rescue NSW Act 1989;					
	• the Work Health and Safety (WHS) Act 2011;					
	b) identify the fire risks and hazards and detailed measures for the development to prevent or mitigate fires igniting;					
	 include procedures that would be implemented if there is a fire on-site or in the vicinity of the site; 					
	d) list works that should not be carried out during a total fire ban;					
	e) include availability of fire suppression equipment, access and water;					
	f) include procedures for the storage and maintenance of any flammable materials;					
	 g) detail access provisions for emergency vehicles and contact details for both a primary and alternative site contact who may be reached 24/7 in the event of an emergency; 					
	 h) include a figure showing site infrastructure, any Asset Protection Zones and the on- site water supply tank(s); 					
	 include location of hazards (physical, chemical and electrical) that may impact on fire fighting activities and procedures to manage identified hazards during fire fighting activities; 					
	 j) include details of the location, management and maintenance of any Asset Protection Zone and who is responsible for the maintenance and management of the Asset Protection Zone; 					
	k) include bushfire emergency management planning;					
	 include details of the 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 that have the potential to ignite surrounding vegetation; and 					
	m) include details on how live transmission infrastructure can be safely isolated in an emergency.					



Condition	Requirement	Construction		Operation		Comments
		Stage 1	Stage 2	Line 1	Line 4	
Waste						
D48	Waste generated during construction, operation, upgrading and decommissioning must be dealt with in accordance with the following priorities:	√	~	✓	✓	Applicable across all stages.
	 a) waste generation must be avoided and where avoidance is not reasonably practicable, waste generation must be reduced; 					
	b) where avoiding or reducing waste is not possible, waste must be re-used, recycled, or recovered; and					
	c) where re-using, recycling or recovering waste is not possible, waste must be treated or disposed of.					
D49	The importation of waste and the storage, treatment, processing, reprocessing or disposal of such waste must comply with the Protection of the Environment Operations Act 1997, the Protection of the Environment Operations (Waste) Regulation 2014, and orders or exemptions under the regulation.	~	~	✓	✓	Applicable across all stages.
D50	Waste must only be exported to a site licensed by the EPA for the storage, treatment, processing, reprocessing or disposal of the subject waste, or in accordance with a Resource Recovery Exemption or Order issued under the Protection of the Environment Operations (Waste) Regulation 2014, or to any other place that can lawfully accept such waste.	✓	~	✓	1	Applicable across all stages.
D51	All waste that is removed from site must be classified in accordance with the EPA's Waste Classification Guidelines, with appropriate records and disposal dockets retained for audit purposes.	~	~	✓	1	Applicable across all stages.



Condition	Requirement	Construction		Construction Operation		Comments
		Stage 1	Stage 2	Line 1	Line 4	
Accommod	lation Camp					
D52	Prior to establishing the accommodation camps, the Proponent must prepare an Accommodation Camp Management Plan to the satisfaction of Council, unless the Planning Secretary agrees otherwise. The plan must:	✓	1	Х	Х	Applicable across all construction stages.
	 ensure utilities at the accommodation camps, including water, wastewater, waste and electricity, are designed and located in accordance with Council specifications and relevant standards, in consultation with Council; 					
	b) ensure the accommodation camp complies with conditions D21 and D46;					
	 ensure any treated wastewater from the accommodation camps used for dust suppression during construction: 					
	 complies with the Australian and New Zealand Environment and Conservation Council (ANZECC) & Agriculture and Resource Management Council of Australia and New Zealand (ARMCANZ) (2000) guidelines for irrigation water quality; 					
	• meets the requirements of the Public Health Act 2010;					
	d) include measure for dust suppression within the accommodation camps;					
	 provide the site layout including building locations, vehicle access and movement, site servicing and utilities infrastructure; and 					
	f) include measures to support local suppliers in servicing the camp where possible.					
	Following approval, the Proponent must implement the Accommodation Camp Management Plan.					
Local Busin	ess and Employment Strategy					
D53	Prior to commencing construction, the Proponent must prepare a Local Business and Employment Strategy for the development in consultation with Council. This strategy must investigate options for prioritising the employment of local and Aboriginal workforce and suppliers for the construction of the development, where feasible.	~	~	Х	Х	Applicable across all construction stages.
	The Proponent must implement the Accommodation and Employment Strategy.					



Condition	Requirement	Construction		Operation		Comments
		Stage 1	Stage 2	Line 1	Line 4	
Rehabilitatio	on					
D54	Within 6 months of the completion of construction, upgrading or decommissioning, unless the Planning Secretary agrees otherwise, the Proponent must rehabilitate the areas where ancillary facilities, accommodation camps and earthwork material sites are located, to the satisfaction of the Planning Secretary. This rehabilitation must comply with the objectives in Table 3.	Х	1	Х	X	There would be no rehabilitation proposed for the Stage 1 of construction disturbance area. Rehabilitation would be undertaken with 6 months of the completion of all construction, upgrading or decommissioning works, unless otherwise approved by the Secretary
						,
PARIE-EN	INRONMENTAL MANAGEMENT, REPORTING AND AUDITING					
Revision of	Strategies, Plans and Program					
E1	The Proponent must review and, if necessary, revise the strategies, plans or programs required under this approval to the satisfaction of the Planning Secretary within 3 month of the:	~	~	~	~	Applicable across all stages.
	 submission of an incident report under condition E6; 					
	 submission of an audit report under condition E11; or 					
	 any modification to the conditions of this approval. 					



Condition	Requirement	Construction		Operation		Comments
		Stage 1	Stage 2	Line 1	Line 4	
Staging, Co	mbining and Updating Strategies, Plans or Programs					
E2	With the approval of the Planning Secretary, the Proponent may:	\checkmark	✓	✓	✓	Applicable across all
	 a) prepare and submit any strategy, plan or program required by this approval on a staged basis (if a clear description is provided as to the specific stage and scope of the development to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program); 					stages. This Staging Report has been prepared to describe the proposed staging of the construction and
	 b) combine any strategy, plan or program required by this approval (if a clear relationship is demonstrated between the strategies, plans or programs that are proposed to be combined); and 					operation phases of the project.
	c) update any strategy, plan or program required by this approval (to ensure the strategies, plans and programs required under this approval are updated on a regular basis and incorporate additional measures or amendments to improve the environmental performance of the development).					
	If the Planning Secretary agrees, a strategy, plan or program may be staged or updated without consultation being undertaken with all parties required to be consulted in the relevant condition in this approval. If approved by the Planning Secretary, updated strategies, plans or programs supersede the previous versions of them and must be implemented in accordance with the condition that requires the strategy, plan or program.					
	If the Planning Secretary agrees, a strategy, plan or program may be staged without addressing particular requirements of the relevant condition of this approval if those requirements are not applicable to the particular stage.					
Notification	s					
Notification	of Department					
E3	Prior to commencing construction, operations, upgrading or decommissioning of the development or, the Proponent must notify the Department in writing via the Major Projects website portal of the date of commencing the relevant phase.	\checkmark	~	~	✓	Applicable across all stages.
	If any of these phases of the development are to be staged, then the Proponent must notify the Department in writing prior to commencing the relevant stage, and clearly identify the development that would be carried out during the relevant stage					



Condition	Requirement	Construction		Construction Operation		Comments
		Stage 1	Stage 2	Line 1	Line 4	
Final Layout	t Plans					
E4	 Prior to commencing construction, the Proponent must submit detailed plans of the final layout of the development to the Department via the Major Projects website, including: a) details on siting of transmission towers, ancillary infrastructure and / or ancillary facilities; and 	V	~	Х	X	Applicable across all construction stages.
	b) showing comparison to the approved layout.					
	The Proponent must ensure that the development is constructed in accordance with the Final Layout Plans.					
Work as Exe	ecuted Plans					
E5	Prior to commencing operations, the Proponent must submit plans that confirm the constructed layout of the development and showing comparison to the final layout plans to the Planning Secretary, via the Major Projects website.	Х	X	~	*	Pre-operation requirements will be undertaken towards the completion of Stage 2 activities. Works as executed plans will be prepared for Operation (Line 1) and Operation (Line 4).
Incident No	tification					
E6	The Department must be notified via the Major Projects website portal immediately after the Proponent 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 3.	~	~	✓	√	Applicable across all stages.
Non-compli	iance Notification					
E7	The Planning Secretary must be notified in writing via the Major Projects website within seven days after the Proponent becomes aware of any non-compliance.	✓	~	✓	~	Applicable across all stages.



Condition	Requirement	Construction		n Operation		Comments
		Stage 1	Stage 2	Line 1	Line 4	
E8	A non-compliance notification must identify the development and the application number for it, set out the condition of approval 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, or will be, undertaken to address the non- compliance.	V	~	✓	~	Applicable across all stages.
E9	A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.	√	~	\checkmark	~	Applicable across all stages.
Notification	of Landowners					
E10	Prior to the commencement of construction, the Proponent must notify the owners of the owners of R1489, R2022 and R2023 of their rights under condition D41.	Х	~	Х	Х	Nominated receivers are visually affected by activities undertaken in Stage 2 of construction.
Independer	nt Environmental Audit					
E11	Independent Audits of the development must be conducted and carried out at the frequency described and in accordance with the Independent Audit Post Approval Requirements (2020), unless otherwise agreed or directed by the Planning Secretary.	~	✓	\checkmark	✓	Applicable across all stages.



Condition	Requirement	Construction		ction Operation		Comments
		Stage 1	Stage 2	Line 1	Line 4	
Access to In	formation					
E12	The Proponent must:	✓	✓	\checkmark	✓	Applicable across all
	 a) make the following information publicly available on its website as relevant to the stage of the development: 					stages.
	(i) the EIS;					
	(ii) current statutory approvals for the development;					
	 (iii) approved strategies, plans or programs required under the conditions of this approval; 					
	 (iv) the proposed staging plans for the development if the construction, decommissioning and/or operation of the development is to be staged; 					
	 (v) a comprehensive summary of the monitoring results of the development, which have been reported in accordance with the various plans and programs approved under the conditions of this approval; 					
	(vi) a record of complaints, which is to be updated on a monthly basis;					
	(vii) any independent environmental audit, and the Proponent's response to the recommendations in any audit; and					
	(viii) any other matter required by the Planning Secretary; and					
	(ix) keep this information up to date.					
APPENDIX *	1 - DEVELOPMENT LAYOUT		- <u> </u>			
APPENDIX 2	2 - OVER-DIMENSIONAL AND HEAVY VEHICLE ACCESS ROUTE					
APPENDIX	3 - INCIDENT NOTIFICATION AND REPORTING 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 Proponent becomes aware of an incident. Notification is required to be given under this condition even if the Proponent fails to give the notification required under condition E6 or, having given such notification, subsequently forms the view that an incident has not occurred.	✓	~	✓	~	Applicable across all stages.



Condition	Requirement	Construction		Operation		Comments
		Stage 1	Stage 2	Line 1	Line 4	
2	Written notification of an incident must:	✓	✓	✓	✓	Applicable across all
	 a) identify the development and application number; 					stages.
	 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 Proponent 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 development 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 Proponent 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	4	~	*	Applicable across all stages.
4	The Incident Report must include:	✓	✓	\checkmark	✓	Applicable across all
	a) a summary of the incident;					stages.
	 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.					

RMM	Requirement	Construction		Opera	ation	Comment
		Stage 1	Stage 2	Line 1	Line 4	
Biodiversit	у					
B1	Impacts to matters of biodiversity conservation significance will be avoided to the greatest extent practicable during finalisation of the detailed design and construction methodology for the project. Micro-siting of the transmission line infrastructure and associated construction working areas and other areas of disturbance will occur to avoid impacts wherever practicable. Site features with the highest biodiversity conservation significance, in particular, threatened species recorded and their habitat, including Acacia acanthoclada, Atriplex infrequens, Austrostipa nullanulla, Dodonaea stenozyga and Santalum murrayanum, will be given the highest priority.	~	~	Х	X	Applicable across all construction stages.
В2	Where vegetation disturbance activities are required in areas that have not previously been subject to biodiversity survey, additional survey will be carried out prior to works occurring to inform detailed design and construction methodology. These surveys will be carried out by a suitably qualified ecologist.	Х	~	х	X	All of the Stage 1 work areas have been subject to biodiversity survey and assessment accordingly to the Biodiversity Assessment Method (BAM).
В3	Opportunities to locate site offices, compounds and ancillary facilities in areas of limited biodiversity value (e.g. cleared land or areas of native vegetation with vegetation integrity scores of less than 17 (in accordance with the NSW Government Biodiversity Assessment Method Operational Manual) will be prioritised.	~	~	Х	X	Applicable across all construction stages.
В4	Existing tracks and clearings will be used, where possible, to avoid the construction of new tracks. Where this is not possible, the design will seek to minimise impacts to native vegetation as a priority.	Х	~	Х	Х	The existing tracks proposed to be used for Stage 1 activities are located along the transmission line corridor.
B5	Transmission line structures will be located and constructed to minimise impact to vegetated riparian corridors, wherever practicable.	Х	\checkmark	Х	Х	There are no riparian zones in the Stage 1 disturbance area.
В6	Conductor line-marking techniques will be implemented during detailed design to minimise bird strike. Use of bird diverters, most likely consisting of the "flapper" variety, will be implemented. Positioning and exact diverter model will be finalised during detailed design but at minimum these will be used within one kilometre of wetland / riverine habitats to reduce impacts on aerial fauna species from collision and allow safer passage within these areas.	Х	~	x	X	Applicable to the transmission line and transmission tower works, which is not associated with Stage 1 activities.

Appendix B - Application of revised mitigation measures



RMM	Requirement	Const	truction	Operation		Comment	
		Stage 1	Stage 2	Line 1	Line 4		
Β7	TransGrid will establish a series of 20-metre-wide connectivity corridors near tower locations that occur in woodland vegetation. These would occur at strategic locations that would be developed as part of a Connectivity Strategy under the Biodiversity Management Plan. These connectivity corridors will involve native vegetation retention up to the 10 metre wide temporary construction centreline clearing zone to better facilitate woodland connectivity.	Х	×	х	Х	Applicable to the transmission line easement, which is not associated with Stage 1 activities.	
Β8	A two year monitoring program following the completion of construction will be implemented to better understand interactions of bird species with the transmission lines and towers. Problematic interactions identified during the program would be considered and options for addressing them implemented as practicable. Options that would be considered include nesting deterrents in high risk areas, installation of alternative nest habitat, relocation of nests or their deconstruction in certain circumstances.	Х	х	~	~	Applicable to the operational phase.	
B9	TransGrid will make a one off funding contribution targeted at further scientific study into the impacts of electric and magnetic fields on birds in Australia.	Х	Х	Х	Х	Applicable to 'Prior to the completion of construction'.	
B10	Nest boxes will be provided to offset the loss of tree hollow fauna habitat in accordance with a Supplementary Hollow and Nest Strategy. The strategy will include the following requirements:	~	~	Х	Х	The presence of tree hollow habitat with the disturbance areas will be confirmed during	
	 survey of tree hollows and nests within the proposed clearing extents 					pre- clearing s	pre- clearing surveys.
	 the size, type, number and location of nest boxes required will be based on the results of the ecological surveys 						
	 appropriately sized nest boxes will be installed within the vicinity of hollow-bearing trees (subject to landholder agreement and suitable existing trees being present) no more than two weeks prior to clearing of the tree 						
	 all nest boxes in a particular location will be installed within 6 months after clearing 						
	 "nest boxes" will include consideration of natural tree hollow re- use and new tree hollow creation 						
	 measures to address and manage nests (such as raptor nests) pre-clearing will be included. 						



RMM	Requirement	Cons	truction	Opera	tion	Comment
		Stage 1	Stage 2	Line 1	Line 4	
B11	 Pre-clearing surveys will be completed prior to clearing at each location by a suitability qualified ecologist. The proposed clearing extents will be marked out on site prior to the pre-clearing surveys. During the surveys, the ecologist will: survey the proposed clearing extent identify any fauna that will require relocation prior to clearing confirm the location and mark out the extents of any biodiversity exclusion zone confirm that hollow-bearing trees within and adjacent to the clearing extents are prominently marked/tagged confirm that nest boxes are in place (where required) in suitable locations adjacent to areas to be cleared, or suitable locations for installation have been identified. 	V	Ý	Х	Х	Applicable across all construction stages.
B12	The results of the pre-clearing surveys will be used to update and confirm the accuracy of sensitive area maps.	~	\checkmark	Х	Х	Applicable across all construction stages.
B13	Biodiversity exclusion zones for retained vegetation, including identified threatened flora populations will be clearly identified by a suitably qualified ecologist prior to the commencement of clearing or any site activity that could damage the vegetation within the exclusion zone. Biodiversity exclusion zones will be physically marked and demarcated, and included on sensitive area maps, prior to clearing.	V	~	Х	Х	Applicable across all construction stages.
B14	Training on biodiversity management practices and the requirements for the project will be provided to all relevant project personnel, including relevant subcontractors, through inductions, toolbox talks and targeted training. Construction workforce will be supplied with sensitive area maps (showing clearing boundaries and exclusion zones), including updates as required.	✓	V	Х	Х	Applicable across all construction stages.
B15	Clearing of native vegetation will be monitored to confirm actual impacts to biodiversity values to inform any final biodiversity offset requirements within the biodiversity offset package. The final offset requirements will be informed by a BAM-C calculation on the recorded clearing. Any additional credit liability identified by this calculation will be met.	~	~	Х	Х	Applicable across all construction stages.



RMM	Requirement	Cons	truction	Operation		Comment
		Stage 1	Stage 2	Line 1	Line 4	
B16	Shrub or ground stratum native vegetation within vegetated riparian zones (within the definition of Water Management Act 2000) of the Great Darling Anabranch, Darling River and/or Murray River (and other defined riparian areas) will be protected to the greatest extent practicable, with vegetation clearing ideally limited to the tree stratum only, with trunk bases being retained in-situ.	Х	¥	Х	Х	There are no riparian zones in the Stage 1 of construction disturbance area.
B17	Activities within vegetated riparian zones will be managed to minimise impacts to aquatic environments. Riparian areas subject to disturbance will be progressively stabilised and rehabilitated.	Х	~	Х	Х	There are no riparian zones in the Stage 1 of construction disturbance area.
B18	A species unexpected finds protocol will be implemented if threatened ecological communities, flora and fauna species, not assessed in the biodiversity assessment, are identified in the disturbance area.	√	~	Х	Х	Applicable across all construction stages.
B19	TransGrid will maintain vegetation for the project in accordance with commitments in the EIS, as amended in the Amendment Report. Vegetation maintenance protocols will be developed accordingly prior to the commencement of any vegetation maintenance activities within the easement and implemented during the operational phase of the project. The vegetation maintenance protocols will identify and address the biodiversity exclusion zones identified in the construction phase and the areas within the maintenance zone where the vegetation is not of a	Х	Х	V	V	Applicable to the operational phase.
	height/growth form that will ever require management. Relevant TransGrid operational personnel and associated vegetation maintenance contractors will receive in training in the vegetation maintenance protocols prior to the commencement of any vegetation maintenance.					



RMM	Requirement	Construction		Opera	tion	Comment
		Stage 1	Stage 2	Line 1	Line 4	
В20	 TransGrid will retire the total quantum of the project's biodiversity offset credit liability confirmed in accordance with the Biodiversity Assessment Method. TransGrid will develop a Biodiversity Offset Package that identifies measures to address the project's offset obligations and the timing and responsibility for implementation. Before commencing any project activities that impact biodiversity values, TransGrid will: confirm the Biodiversity Offset Package with the Department of Planning, Industry and Environment, and provide security to the Minister for Planning and Public Spaces for a Biodiversity Conservation Fund payment to cover any outstanding offset credit liability if the package is not implemented. 	~	✓	Х	Х	Applicable across all construction stages.
Aboriginal	heritage					
AH1	The detailed design and construction methodology, and associated final disturbance area, will be developed to avoid impacts to features/items of Aboriginal archaeological significance as far as practical. Avoidance and minimisation of impact to features/items and Potential Archaeological Deposits (PADs) of moderate or higher archaeological significance will be prioritised.	~	~	x	Х	Applicable across all construction stages.



RMM	Requirement	Const	truction	Operation		Comment
		Stage 1	Stage 2	Line 1	Line 4	
AH2	Aboriginal stakeholder consultation will be carried out in accordance with the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010a).	*	~	Х	Х	Applicable across all construction stages.
	Engagement with Registered Aboriginal Parties (RAPs) will consist of the following:					
	 Aboriginal heritage site surveys (AH3) - review of proposed methodologies and involvement in the survey activities in the field (for ground or vegetation disturbance outside of previously surveyed areas) 					
	 test excavation activities (AH4) - review of proposed methodologies and involvement in the test excavation activities in the field 					
	 review of the draft addendum report/s (relating to surveys (AH3), test excavations (AH4) and scar trees (AH5)), and consultation on the draft reports which will typically be in the form of a RAP meeting 					
	 provision of final addendum report/s will be provided to RAPs (AH3, AH4, AH5) 					
	 involvement in establishment of Aboriginal heritage exclusion zones prior to construction commencing (AH7). 					
	Further cultural information will be gathered during consultation undertaken in association with these activities. All addendum reports to the Aboriginal Cultural Assessment Report (CHAR) will be provided to RAPs for comment, and input will be considered, and actioned wherever practicable.					



RMM	Requirement	Const	truction	Opera	tion	Comment
		Stage 1	Stage 2	Line 1	Line 4	
АН3	An Aboriginal heritage survey will be carried out with RAPs where ground or vegetation disturbance activities are required in all locations outside of the previously surveyed heritage survey area (including water supply points), prior to works occurring in any such areas.	Х	4	Х	Х	All areas for Stage 1 of construction have been surveyed.
	These surveys will be carried out in accordance with the Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW (2010).					
	If no sites are found or if sites are found and they will not be impacted, then a letter report will be provided that gives notification of this and clearance to proceed.					
	Where sites are located and will be impacted, a draft survey addendum report/s to the ACHAR will be prepared for each of these survey areas. The report(s) will:					
	 detail findings of the survey activities 					
	 detail where test excavation is required in accordance with AH4 to inform detailed design 					
	 outline any additional mitigation strategies beyond those required by AH5 to AH12 					
	• be presented to the RAPs for comment.					
	Final reports will be provided to RAPs and to Heritage NSW for their information prior to the commencement of construction that impacts these locations.					



RMM	Requirement	Const	Construction Operation		Comment																			
		Stage 1	Stage 2	Line 1	Line 4																			
AH4	In developing the detailed design and construction methodology, the construction contractor will review the location of all identified PADs and will aim to avoid and/or minimise direct impacts to the identified PADs.	Х	~	Х	X	No Stage 1 of construction activities are proposed within any identified PADs.																		
	Where direct impacts cannot be avoided, test excavation programs will be carried out in the parts of any PADs where direct impact is likely (including where the root-ball of trees are being removed).																							
	The purpose of the test excavations will be to determine the presence or absence and significance of subsurface archaeological deposits.																							
	Test excavations works will be carried out in accordance with a methodology that is presented to and consulted on with the RAPs.																							
	Test excavation addendum report/s to the ACHAR will be prepared for each test excavation program(s) which will:																							
	 detail findings of the test excavation activities 																							
	 outline how the detailed design has been further developed to avoid or minimise impacts to the identified constraints/features of significance/PADs 																							
	 as applicable, detail any additional mitigation strategies beyond those required by AH6 to AH12, and the required timing for these to be implemented 																							
	• be presented to the RAPs for comment.																							
	Final reports will be provided to RAPs and to Heritage NSW prior to the commencement of construction that impacts these locations. The addendum report(s) may be staged to enable progressive commencement of construction. Any additional mitigation strategies beyond those required by AH6 to AH12, and the required timing of implementation, will be included with the Construction Environmental Management Plan and implemented accordingly.																							



RMM	Requirement	Const	truction	Operation		Comment								
		Stage 1	Stage 2	Line 1	Line 4									
AH5	All scarred trees identified during archaeological survey will be assessed by a qualified arborist to determine tree age and likely cause of the scarring in order to confirm the scientific significance prior to any impact to the scarred trees.	Х	~	Х	Х	There are no scarred trees in the location of the Stage 1 (construction) works.								
	Impacts to all scarred trees (including those of cultural significance) will be avoided where possible through design or construction methodology and must only be removed for permanent infrastructure and/or to meet Vegetation Clearance Requirements at Maximum Line Operating Conditions (TransGrid, 2003).													
	If any scarred tree cannot be avoided, the tree will be subject to 3D scanning, followed by salvage of the scarred trunk. The results of this assessment will be reported on in addendum reports.													
	Reports will be provided to RAPs for comment. Final reports will be provided to RAPs and to Heritage NSW.													
AH6	All portions of artefact scatters that are to be directly impacted will require surface collection prior to construction commencement in those areas.	Х	√	Х	Х	There are no artefact scatters which will be directly impacted								
	Additionally, based on the outcomes of the test excavation, items or PADs will be subject to surface collection or salvage prior to the commencement of construction in those areas.													by Stage 1 (construction) works.
	The activities will be documented in a surface collection report.													
AH7	Aboriginal heritage exclusion zones will be established to protect:	✓	✓	Х	Х	Applicable across all								
	 known features/items of significance that have been identified to remain in-situ throughout construction (and not subject AH6) 					construction stages.								
	 scarred trees that are to remain in-situ. 													
	Suitable controls will be identified in the heritage management sub-plan, which may include site fencing and sediment control. Aboriginal heritage zones will be demarcated by a suitably qualified archaeologist in consultation with the RAPs prior to the commencement of construction at each location.													
	Areas of PADs that are located within areas of vegetation clearance where ground disturbance will not occur will be managed through construction methodologies and will not be delineated as exclusion zones. These methodologies will be developed in the heritage sub-plan.													



RMM	Requirement	Construction		n Operation		Comment
		Stage 1	Stage 2	Line 1	Line 4	
AH8	Construction planning and management will ensure that indirect impacts to features of heritage significance located outside areas of direct impact do not occur (including physical disturbance from surface water drainage or other mechanism).	✓	✓	Х	Х	Applicable across all construction stages.
AH9	Cultural and historic heritage awareness training will be carried out for all personnel working on the proposal prior to the personnel participating in construction activities.	~	✓	Х	X	Applicable across all construction stages.
	to project locations and project protocols that must be complied with to minimise and manage potential impacts to those features.					
AH10	If at any time during construction, any items of potential Aboriginal archaeological or cultural heritage significance, or human remains are discovered, they will be managed in accordance with the Aboriginal heritage unexpected finds protocol (refer to Appendix 2 of the Non-Aboriginal and Aboriginal Cultural Assessment Report (Navin, 2021)).	~	~	Х	X	Applicable across all construction stages.
AH11	A temporary repository of any retrieved archaeological material and Aboriginal objects will be appropriately secured and under the care of the archaeological consultant.	✓	✓	X	X	Applicable across all construction stages.
	The strategy for the long-term conservation of salvaged or collected Aboriginal objects will be determined in consultation with the RAPs.					
AH12	Features/items of heritage significance that will remain in-situ within the transmission line easement will be mapped and recorded within GIS systems managed by TransGrid. Relevant TransGrid systems and procedures will be updated as required with protocols that will be implemented during operation to ensure that impacts to the features/items of significance do not occur during maintenance activities. to ensure inadvertent impacts do not occur during maintenance activities.	Х	Х	Ý	¥	Applicable to the operational phase only.
Non-Aborig	jinal heritage					
NAH1	A non-Aboriginal heritage exclusion zone will be established for sites PEC-W- H-1 and PEC-W-SE- H1 (Survey Marker Trees). These sites will be fenced during construction and vegetation clearance for the proposal, to avoid inadvertent impacts during works. If impacts cannot be avoided, then the tree will be archivally recorded and research undertaken to confirm the nature and history of the item prior to impact occurring.	X	V	X	X	Not relevant to Stage 1 (construction) works as the works are not in the vicinity of these items.



RMM	Requirement	Cons	truction	Operation		Comment
		Stage 1	Stage 2	Line 1	Line 4	
NAH2	Should the disturbance area for the proposal extend beyond the survey area, further assessment by an archaeologist will be carried to determine the likelihood of occurrence and significance of potential archaeology and impacts from the proposal (including built heritage) prior to the commencement of construction in these areas. The results of this assessment will be reported on in addendum reports for non-Aboriginal heritage. Reports will be provided to Heritage NSW.	X	~	Х	X	All areas for Stage 1 (construction) have been surveyed.
NAH3	If at any time during construction, any items of potential non-Aboriginal archaeological significance, or human remains are discovered, they will be managed in accordance with the non-Aboriginal unexpected finds protocol (refer to Appendix 2 of the Non-Aboriginal & Aboriginal Cultural Heritage Assessment Report (Navin, 2021)).	~	~	Х	X	Applicable across all construction stages.
Land use ar	nd property					
LP1	During detailed design, access tracks (temporary and permanent) will be determined in consultation with landholders and to minimise impacts to agricultural activities to the greatest extent possible. Where permanent tracks are required, a single access track will be designed to serve both temporary and permanent purposes, where possible.	~	~	Х	X	Applicable across all construction stages.
LP2	 The locations of transmission line structures, (other permanent structures and the extents of associated construction areas or compounds) will be located where possible to avoid or minimise impacts, or as agreed with the affected landholder, on: cropping and irrigated horticultural land areas used for set up and pack up of agricultural equipment, entry points and turning areas radiocommunication sensitive areas drainage catchments for farm dams locations of high biosecurity risk. 	×	~	Х	X	Applicable across all construction stages.
LP3	Final transmission line easement will be located parallel with existing transmission lines or road corridors or along property boundaries, where possible, to reduce potential fragmentation of properties and disturbance to existing land uses, subject to the outcomes of land access negotiations with affected landholders.	Х	~	Х	X	There are no transmission line easement works as part of the Stage 1 (construction) works.



RMM	Requirement	Const	truction	Operation		Comment
		Stage 1	Stage 2	Line 1	Line 4	
LP4	 To minimise disruption to agricultural activities: landholders will be consulted regarding any required adjustments to property infrastructure (fences, access tracks, etc) and the proposed timing and location of construction works, especially where some restriction on vehicular or stock movements will be necessary. Appropriate arrangements will be negotiated with the affected parties and in place prior to any such disruption property infrastructure (such as gates) will be managed in accordance with landholder requirements and any damage caused by construction will be repaired promptly use of existing roads, tracks and other existing disturbed areas will be prioritised where access is required across open spaces, care will be exercised to ensure that minimum damage is caused to the surface by confining vehicular or plant movement, as far as possible, to one route. 	*	*	X	X	Applicable across all construction stages.
LP5	Disturbed areas will be stabilised and appropriately rehabilitated as soon as feasible and reasonable following the completion of construction. This will be carried out in consultation with the relevant landholder.	Х	~	✓	✓	This requirement is relevant to the completion of construction.
LP6	 Procedures will be implemented so that potential impacts or conflicts between livestock and construction activities are appropriately managed. Procedures will be developed in consultation with affected landholders will include management of: noise intensive activities during sensitive periods within the livestock production cycle (such as lambing and calving) vehicle movements and other activities within the vicinity of livestock movement of stock away from potential stressors created by construction activities. 	Ý	¥	X	X	Applicable across all construction stages.



RMM	Requirement	Const	truction	Operation		Comment
		Stage 1	Stage 2	Line 1	Line 4	
LP7	Biosecurity controls will be implemented during construction to minimise the risk of off-site transport or spread of disease, pests or weeds. Controls will include (but not limited to):	~	✓	Х	Х	Applicable across all construction stages.
	 inspections and cleaning of vehicles, machinery, and personnel equipment prior to movement on and off the construction work areas or between properties 					
	 minimising movements across adjoining farmland including trip numbers and locations 					
	 additional measures where localised areas of high biosecurity risks have been identified. 					
	The specific controls applicable to a property will be identified in consultation with the affected landholder. The effectiveness of these controls will be regularly monitored.					
LP8	Where present, weeds will be managed in consultation with Western Local Land Services (LLS), Wentworth Shire Council and NSW Department of Primary Industries.	√	✓	Х	Х	Applicable across all stages.
LP9	In the event of new infestations of notifiable weeds as a result of construction activities, the relevant control authority will be notified as per Biosecurity Act 2015 and Biosecurity Regulation 2017.	v	✓	Х	X	Applicable across all stages.
LP10	Fencing and access arrangements along the transmission line easement, such as locked gates, will be determined in consultation with landholders and implemented.	Х	Х	√	*	Applicable to operational phase only.
LP11	Biosecurity controls, confirmed in consultation with the affected landholders, will be implemented during operation to minimise the risk of off-site transport or spread of disease, pests or weeds during maintenance activities.	Х	Х	\checkmark	*	Applicable to operational phase only.
LP12	Where present within the operational transmission line easement and associated areas for permanent infrastructure, weeds will be managed in accordance with the Biosecurity Act 2015.	Х	Х	\checkmark	•	Applicable to operational phase only.
LP13	Management of access including opening and closing of gates and monitoring of fencing will be done in accordance with landholder requirements. Any damage caused by maintenance activities will be repaired promptly.	Х	Х	✓	•	Applicable to operational phase only.



RMM	Requirement	Const	truction	Operation		Comment
		Stage 1	Stage 2	Line 1	Line 4	
Landscape	and visual amenity					
LV1	Opportunities for the retention and protection of existing trees within the disturbance area will be identified during detailed construction planning. Trees that do not pose any risk to the safe operation of the transmission infrastructure will be retained where practicable.	Х	×	Х	Х	Not applicable to Stage 1 of construction. There will likely be limited opportunities for tree retention for Stage 1 as the area is required as an earthworks material site, camp and compound.
LV2	Temporary and permanent access will be designed to minimise vegetation removal, changes to landform, and visual impacts.	X	~	X	X	Not applicable to Stage 1 of construction. Access within the earthworks material site, substation, accommodation camp and construction compound will require clearing of vegetation. There is considered to be limited opportunity for access to be designed to minimise impacts for the Stage 1 (construction) disturbance area, as the access tracks will be located within the earthworks material area and within the construction compound and accommodation camp.
LV3	Proposed permanent engineering batters and water management measures will be designed to integrate with the existing landforms and natural features.	~	~	Х	Х	Applicable across all construction stages.
LV4	Lighting at construction compound and accommodation camps will be designed and operated in accordance with AS4282-2019 Control of the obtrusive effects of outdoor lighting.	*	~	Х	Х	Applicable across all construction stages.



RMM	Requirement	Construction		n Operation		Comment
		Stage 1	Stage 2	Line 1	Line 4	
LV5	 Transmission line structures, where possible, are designed: to maximise distance from private residences to use local vegetation and landform to provide screening from residences or from the road 	Х	✓	Х	Х	Stage 1 (construction) works do not include of transmission line structures works.
	 to be regularly spaced to reduce the potential visual impact where the proposal alignment is visible for a long duration, and in open landscapes 					
	 to be positioned alongside existing transmission line structures where they are adjacent to existing transmission lines where feasible 					
	 to avoid the location of transmission line structures on locally prominent landforms 					
	 to minimise clearing along creeklines. 					
LV6	Where the transmission line crosses a roadway, transmission line structures will be located to maximise the distance from the roadway where feasible and where it will achieve an improved visual amenity outcome, where feasible and reasonable.	Х	~	Х	Х	Stage 1 (construction) works do not include of transmission line structures works.
LV7	The Tree Protection Zone (as defined in AS4970-2009 Protection of Trees on Development Sites) of retained trees within or immediately adjacent to the disturbance area will be protected through the restriction of construction activities (refer Section 4.2 of AS4970- 2009), to minimise the impact of the works on the long term health of these trees.	~	✓	Х	X	Applicable across all construction stages.
LV8	Opportunities for screening vegetation to be provided on private property will be investigated where, once at a mature height, it will reduce an identified visual impact from a residence. This will be undertaken in negotiation with the affected resident. This will be informed by further assessment to determine the extent of the impact and appropriateness of any screening vegetation. Any such screening vegetation will be planted prior to completion of construction and will be maintained by the landholder.	Х	1	Х	X	Stage 1 (construction) works do not include screening of vegetation for private property.
LV9	Lighting at the substation will be designed and operated in accordance with AS/NZS 4282:2019 Control of the obtrusive effects of outdoor lighting.	Х	Х	✓	~	Applicable to operational phase only.


RMM	Requirement	Construction		Opera	tion	Comment
		Stage 1	Stage 2	Line 1	Line 4	
Social and e	economic					
SE1	 A Community and Stakeholder Engagement Plan will be implemented. This will include: targeted stakeholder consultation with Local Government, chamber of commerce, Traditional Owners, landholders, emergency services and service providers to ensure plans for the proposal are integrated with local needs and priorities and proactively respond to community or stakeholder concerns including those of neighbouring or nearby landholders culturally appropriate ceremonies of recognition aligned with proposal activities and key milestones, in alignment with the TransGrid Reconciliation Action Plan. 	¥	*	Х	Х	Applicable across all construction stages.
SE2	All acquisitions of privately-owned land would be carried out in consultation with the landholders through the private treaty process or in accordance with the requirements of the Land Acquisition (Just Terms Compensation) Act 1991 and the supporting NSW Government Land Acquisition Reform 2016.	~	¥	Х	Х	Applicable across all construction stages.
SE3	 A Local Business and Employment Strategy will be implemented to guide local opportunities during construction, and where possible, align with existing plans and strategies of Wentworth Shire Council and Mildura Rural City Council, and TransGrid's Reconciliation Action Plan. The initiatives will be prepared in consultation with Wentworth Shire Council, Mildura Rural City Council and key community stakeholders and organisations in the region. The strategy will consider local market conditions and capacity, and will include initiatives for: local supplier and labour procurement targets Aboriginal workforce and business participation training and upskilling programs for local labour force programs to inform local businesses of contracting opportunities and requirements consideration of use of available local infrastructure and services for construction activities such as the Wentworth Aerodrome, where feasible transitioning the local workforce following the completion of construction. 	~	*	X	X	Applicable across all construction stages.



RMM	Requirement	Cons	truction	tion Operation		Comment
		Stage 1	Stage 2	Line 1	Line 4	
SE4	 A Community Benefit Plan will be implemented to guide opportunities to deliver benefits to local communities during and following construction. The plan will be prepared in consultation with Wentworth Shire Council, Mildura Rural City Council and key community stakeholders and organisations in the region, and will align with TransGrid's Community Partnerships Program. The plan will include (but is not limited to): initiatives to create positive social contributions in local communities and to respond to community priorities and needs initiatives for Aboriginal heritage impacts of the proposal to be managed in partnership with local Aboriginal organisations exploring opportunities to repurpose temporary infrastructure to address local infrastructure needs. 	*	~	Х	X	Applicable across all construction stages.
SE5	A Workforce Management Plan will be implemented to provide construction workforce support services to promote health and wellbeing and to manage positive social integration with existing communities. The plan will be prepared in consultation with Wentworth Shire Council, Mildura Rural City Council and social infrastructure service providers near accommodation camps so that the needs of the construction workforce are coordinated to minimise pressure on existing health services and social infrastructure.	~	~	Х	X	Applicable across all construction stages.
Hydrology,	flooding and water quality					
HF1	Permanent operational infrastructure and landforms within the transmission line corridor will be designed and implemented/formed to minimise any potential scour and erosion risks associated with surface water runoff.	v	√	Х	Х	Applicable across all construction stages.
HF2	Detailed construction planning will consider flood risk at construction areas. This will include identification of measures that will be implemented to not worsen flood impacts downstream and on other property and infrastructure during construction up to and including the 1% AEP flood event, and review of site layout and staging of construction works to avoid or minimise obstruction of overland flow paths and to limit the extent of flow diversion required. Procedures as detailed in the flood emergency management procedures will be implemented in response to flood events, including the evacuation of personnel.	X	~	X	X	Stage 1 (construction) disturbance area is not identified as flood prone land.



RMM	Requirement	Const	truction	Operation		Comment
		Stage 1	Stage 2	Line 1	Line 4	
HF3	 A water quality monitoring program will be implemented to establish baseline water quality conditions in the Darling River, Darling Anabranch and Murray River prior to construction, and to observe any changes in water quality that may be attributable to the proposal during construction. The frequency, location and duration of sampling will be detailed in the monitoring program, but will include: at least two monitoring locations located downstream and upstream of the proposal on the Darling River, Darling Anabranch and, Murray River monitoring for total dissolved solids, total suspended solids, total nitrogen and total phosphorus. Sampling will commence at least 6 months prior to the commencement of construction until the surfaces in the vicinity of the waterways that were disturbed by proposal activities are adequately stabilised and no longer pose a significant sedimentation risk to the waterways. The monitoring program will include corrective and preventative actions that will be taken to address any water quality issues caused by the proposal, as in distance and the proposal activities are provide the proposal activities are used by the proposal, as in distance and the proposal set of the surfaces and the proposal set of the surfaces and preventative actions that will be taken to address any water quality issues caused by the proposal, as 	X	4	X	X	The Darling River, Great Darling Anabranch or Murray River are not in the vicinity of Stage 1 (construction) disturbance area.
HF4	Water supply options and management will be undertaken in accordance with agreements between the construction contractor and Wentworth Shire Council.	*	¥	Х	Х	Applicable across all construction stages.
HF5	 Erosion and sediment measures will be implemented in accordance with the principles and requirements in: Managing Urban Stormwater - Soils and Construction, Volume 1 (Landcom 2004), and Volumes 2A and 2C (NSW Department of Environment, Climate Change and Water 2008), commonly referred to as the 'Blue Book' Best Practice Erosion and Sediment Control (IESCA - 2008) TransGrid's HSE Guideline Guidelines for Controlled Activities on Waterfront Land (NRA 2018). 	 Image: A start of the start of	~	Х	Х	Applicable across all construction stages.
HF6	Maintenance works in the vicinity of waterways will be conducted in accordance with the TransGrid's HSE Guideline.	Х	Х	√	\checkmark	Applicable to operational phase only.



RMM	Requirement	Construction		Opera	tion	Comment
		Stage 1	Stage 2	Line 1	Line 4	
Air Quality						
AQ1	Construction air quality management measures will be detailed in the Air Quality Management Plan and implemented during construction to minimise particulate and gaseous emissions as far as possible. Measures will include (but not limited to):	✓	*	Х	Х	Applicable across all construction stages.
	 use of water sprays or dust suppression surfactants as required for dust suppression where required and appropriate 					
	 adjusting the intensity of activities based on observed dust levels and weather forecasts 					
	 minimising the amount of materials stockpiled and position stockpiles away from surrounding receivers 					
	 vehicle movements to be strictly limited to designated entry/exit routes and parking areas, and measures to minimise the tracking of material onto paved roads 					
	covering of loads					
	 stabilising disturbed areas as soon as practicable, including new access routes 					
	 minimising the extent of disturbance as far as practicable 					
	 regularly conducting visual inspections of dust emissions and applying additional controls as required. 					
AQ2	Ensure that all vehicles and machinery are fitted with appropriate emission control equipment and maintained in a proper and efficient manner.	~	~	Х	Х	Applicable across all construction stages.



RMM	Requirement	Construction		Operation		Comment
		Stage 1	Stage 2	Line 1	Line 4	
AQ3	Measures will be implemented at concrete batching plants to minimise emissions to air as far as possible and will be regularly inspected with additional controls implemented as required. Measures to minimise emissions to air may include:	Х	~	Х	Х	No batching plants are proposed as part of the Stage 1 (construction) activities.
	 all aggregate and sand will be stored appropriately in storage bins or bays to minimise dust generation, and material will not exceed the height of the bay 					
	 cement silos and hoppers will be fitted with dust filters 					
	 all inspection points and hatches will be fully sealed 					
	 all dry raw materials to be transferred into the bowl of an agitator via front end loaders by maintaining adequate moisture levels and/or an enclosed conveyor 					
	 the cement silo will be fitted with fitted with emergency pressure alert and automatic cut off overfill protection 					
	 transfer of cement from storage to batching will occur via sealed steel augers 					
	 regularly inspect dust emissions and apply additional controls as required. 					
AQ4	To minimise dust emissions associated with the proposed crushing and screening activities, the following will be implemented:	~	~	Х	Х	Applicable across all construction stages.
	 ensure screen covers are fitted to the screening operations 					
	 control dust emissions from crushing operations using water sprinklers, where required and appropriate 					
	 inspect the water sprinklers on a regular basis to ensure operational efficiency 					
	 where practicable, install wind breaks in appropriate locations adjacent to the dust generating equipment and processes 					
	 prior to crushing, dampen the rocks during dry weather conditions. 					



RMM	Requirement	Construction		Operation		Comment
		Stage 1	Stage 2	Line 1	Line 4	
ΑQ5	To ensure potential odour emissions from the wastewater treatment plants are minimised, the following additional management measures will be implemented:	~	✓	Х	Х	Applicable across all construction stages.
	 prevent excessive inorganic material accumulating on the screens by disposing of screened material in waste bins on a regular basis 					
	 place waste bins containing screened material and sludge as far away as practicable from the construction compound and accommodation sites 					
	 ensure waste bins are fully closed at all times remove screened material and sludge from site at regular intervals and dispose in an appropriate manner. 					
Noise and v	ribration					
NV1	An Operational Noise Review will be prepared to confirm the predicted noise impacts from the proposal (based on the final detailed design) and refine the operational mitigation measures that will be implemented so operational noise impacts complies with the proposal noise trigger levels, where feasible and reasonable.	~	✓	Х	Х	Applicable across all construction stages.
NV2	 Where exceedances of the project proposal specific trigger noise levels are predicted, feasible and reasonable operational noise and vibration mitigation measures will be further investigated during detailed design, in consultation with the affected receivers. This may include (in order of priority): land use planning and provision of appropriate buffer distances to increase the distance between the final transmission line alignment and the surrounding sensitive receivers and ultimately minimise the number of sensitive receivers within the audible risk noise zones noise control at the noise transfer path, such as noise barriers noise control at the receiver, such as 'at property' treatment to 	X	•	V	Ý	Applicable to the 330kV transmission line which is not included with Stage 1 (construction) works. Mitigation measures identified for the Buronga substation synchronous condenser and ancillary buildings to be implemented prior to commencement of operation of the synchronous condenser.
	upgrade aspects of the dwellings including the façade or ventilation systems. Additional measures identified through this process will be implemented prior to commencement of operation.					



RMM	Requirement	Const	truction	Opera	tion	Comment
		Stage 1	Stage 2	Line 1	Line 4	
NV3	Construction methodologies and measures that minimise noise and vibration levels during construction will be investigated during detailed design and implemented where feasible and reasonable. This will be supported through the completion of additional assessments (where construction noise levels are likely to exceed relevant noise management levels based on the final construction methodology). This will: • consider the proposed layouts of work areas or construction	Ý	¥	Х	Х	Applicable across all construction stages.
	compounds and accommodation camps					
	 The hoise and vibration generating activities that will take place assess the predicted noise and vibration levels against the relevant management levels 					
	 incorporate feasible and reasonable mitigation and management measures in accordance with the ICNG. 					
NV4	Further engagement and consultation with affected receivers will be carried out to understand their preferences for mitigation and management measures where exceedances of noise management levels are predicted. Based on this consultation, appropriate mitigation and management options will be considered and implemented where feasible and reasonable to minimise the impacts.	~	~	Х	Х	Applicable across all construction stages.
NV5	 A Construction Noise and Vibration Management Plan (CNVMP) will be prepared by the construction contractor prior to construction works and will (as a minimum): examine feasible and reasonable noise mitigation where management levels are likely to be exceeded examine feasible and reasonable noise measures to manage traffic noise impacts on public roads where exceedances above 2 dB are identified at any sensitive receiver describe associated noise and vibration monitoring programs, as required describe proactive and reactive strategies for dealing with any noise complaints outline community consultation measures including notification requirements. This CNVMP will be implemented for the duration of construction. 	~	~	Х	X	Applicable across all construction stages.



RMM	Requirement	Const	Construction Operation		tion	Comment
		Stage 1	Stage 2	Line 1	Line 4	
NV6	 An out of hours works (OOHW) protocol will be implemented for all construction activities likely to generate noise levels above the relevant noise management level at any sensitive receiver outside the standard construction hours defined in Interim Construction Noise Guideline (DECC, 2009). The OOHW protocol and will include: details of what works are required outside standard construction hours noise management safeguards and other reasonable and feasible mitigation and management measures (including agreement with sensitive receivers), including avoiding or minimising activities or the use of equipment likely to generate the highest noise levels, and implementing respite periods where works are likely to result in NML exceedances for sensitive receivers community consultation procedures, including letterbox drops, notification protocols, and site contact information for the works complaints handling procedures. 	Ý	*	X	X	Applicable across all construction stages.
NV7	Where noise intensive equipment is to be used near sensitive receivers and is likely to result in an exceedance of the applicable noise management level, the works will be scheduled for during standard construction hours (unless agreements with affected sensitive receivers have been reached).	√	~	Х	Х	Applicable across all construction stages.
NV8	 Where residences or other sensitive receivers/structures are within the minimum working distances for vibration (as identified in Table 17-3 of the EIS): different construction methods with lower source vibration levels will be investigated and implemented, where feasible attended vibration measurements will be undertaken at the start of the works to determine actual vibration levels at the structure. Works will cease if the monitoring indicates vibration levels are likely to, or do, exceed the relevant criteria. 	X	¥	Х	Х	No residences or other sensitive receivers/ structures are within the minimum working distances for vibration as a result of the Stage 1 (construction) works.
NV9	Temporary batching plants along the transmission line corridor will be positioned to ensure compliance with NMLs at the nearest sensitive receivers.	Х	~	X	Х	No batching plants are proposed as part of the Stage 1 (construction) works.



RMM	Requirement	Cons	truction	Operation		Comment
		Stage 1	Stage 2	Line 1	Line 4	
NV10	If blasting is required, a blasting vibration and overpressure assessment will be completed to demonstrate that blasting and associated activities will not exceed noise and vibration limits at residences or other sensitive receivers. Based on outcomes of this assessment, a blast management strategy will be implemented that details how blasting will be carried out in a manner that complies with relevant noise and vibration limits, and notification requirements with landholders.	Х	Х	Х	Х	No blasting is proposed.
Traffic						
TA1	Site access / egress points will be designed to minimise conflicts with vehicle movements on the road network and in accordance with relevant safety requirements. This may include the provision of acceleration and deceleration lanes at accommodation camp locations. Any designs will be in accordance with the Traffic Control at Worksites, Austroads Guide to Road Design and Austroads Guide to Traffic Management, and approved by the relevant road authority.	*	¥	Х	Х	Applicable across all construction stages.
TA2	Road pre-condition surveys will be carried out for the public road network in the vicinity of access points to construction compounds, construction camps and construction areas, and for roads for which proposal-related traffic within the Wentworth Shire LGA will be the main source of traffic prior to the use of the roads by proposal-related heavy vehicles. The pre-condition surveys will be undertaken in consultation with relevant councils and road owners. This will include identification of existing conditions and mechanisms to repair damage to the road network caused by construction vehicles associated with the proposal.	¥	~	Х	Х	Applicable across all construction stages.
TA3	The community will be notified in advance of proposed road network changes through appropriate forms of communication.	~	~	Х	Х	Applicable across all construction stages.
TA4	Road Occupancy Licence(s) will be sought (as required) for any road closures (full or partial) prior to any such closure. The timing of any closures will be carried out to minimise impacts to the road network in accordance with the conditions of the licence.	✓	~	X	X	Applicable across all construction stages.



RMM	Requirement	Construction		Operation		Comment
		Stage 1	Stage 2	Line 1	Line 4	
TA5	Permits from the National Heavy Vehicle Regulator (NHVR) will be obtained where required to provide oversized and overmass vehicles access during construction.	~	√	Х	X	Applicable across all construction stages.
	Permit applications will be supported by a Vehicle Movement Plan (VMP), prepared to indicate the proposed heavy vehicle route(s). The Vehicle Movement Plan will consider activities of adjoining land uses and safety of the public, particularly when entering urban areas from rural highways.					
TA6	Construction access/egress, and construction movements, will be managed to ensure pedestrian and cyclist safety.	~	\checkmark	Х	Х	Applicable across all construction stages.
TA7	Adjustments to haulage routes in response to road closures by Wentworth Shire Council (e.g. during wet weather conditions or during other maintenance or other upgrade activities) will be identified in consultation with Wentworth Shire Council and affected residents, and suitable management measures identified and implemented.	~	✓	Х	Х	Applicable across all construction stages.
TA8	Access to properties for emergency vehicles will be provided at all times.	~	\checkmark	Х	Х	Applicable across all construction stages.
TA9	Access to properties will be maintained or alternative arrangements agreed in consultation with landholders.	✓	\checkmark	Х	Х	Applicable across all construction stages.
TA10	Following completion of construction, condition surveys will be carried out. Any damage as a result of construction vehicles will be repaired following the completion of construction (and as needed through the construction period to maintain safe road conditions).	✓	~	Х	Х	Applicable across all construction stages.
TA11	TransGrid will commit to a Road Maintenance Agreement with Wentworth Shire Council to ensure appropriate remediation of roads used by project- related vehicles to address any damage and deterioration caused by the construction of the proposal.	✓	~	x	Х	Applicable across all construction stages.



RMM	Requirement	Cons	truction	Operation		Comment
		Stage 1	Stage 2	Line 1	Line 4	
Hazards an	d risks					
HR1	The proposal will be designed and constructed in accordance with the Guidelines for Limiting Exposure to Time-Varying Electric and Magnetic Fields (1 Hz - 100 kHz) (International Commission on Non-Ionizing Radiation Protection (ICNIRP), 2010) The design will meet the EMF exposure guidelines set out in Table 19-2 of the EIS and worst case scenarios within TransGrid's Transmission Line Design	~	~	Х	Х	Applicable across all construction stages.
HR2	A minimum 50m wide managed Asset Protection Zone will be provided to the hazard perimeter of the fixed construction equipment and camp site buildings unless an alternative fire protection approach that achieves the same level of bushfire risk management is identified by a suitably qualified specialist during detailed design. Any Asset Protection Zone will be regularly maintained to provide a maximum grass height of 100mm -150mm during the prescribed Bushfire Danger Period and when the grassland fuel reaches 70 per cent cured.	~	 Image: A start of the start of	Х	X	Applicable across all construction stages.
	Vegetation inside the main construction compounds and accommodation camp sites will be regularly maintained to a maximum height of 75mm.					
HR3	Buildings within the construction compound and camp site will be constructed to comply with Section 3 and Section 5 (BAL 12.5) of A.S. 3959 - 2018 -'Construction of Buildings in Bushfire Prone Areas'. The sub-floor space of each building will be enclosed with stainless steel flymesh securely fixed to the external wall/s and buried into the ground. All joints will be overlapped and sealed.	v	*	Х	Х	Applicable across all construction stages.
HR4	Water for fire-fighting operations will be confirmed during detailed design with consideration to occupancy density and site layout. This will include onsite static water supply and fire-fighting hose reels. All weather access having a minimum width of 4 metres will be provided to the static water supply tanks.	~	✓	Х	Х	Applicable across all construction stages.
HR5	Consultation with emergency services, including the Rural Fire Service and Fire and Rescue NSW will be undertaken during detailed design to ensure emergency access provisions are provided during operation.	~	√	Х	Х	Applicable across all construction stages.
HR6	Prior to the occupation of the construction camps and offices, all bush fire protection and mitigation measures would be certified as compliant with relevant regulatory requirements by a suitably qualified bush fire consultant.	~	~	Х	Х	Applicable across all construction stages.



RMM	Requirement	Construction		Operation		Comment
		Stage 1	Stage 2	Line 1	Line 4	
HR7	Shielding will be used and a water supply (nine kilogram water fire extinguisher) and trained operator present during all outdoor hot works/grinding activities, and during vegetation slashing within and adjacent to the construction compound and camp sites. No outdoor hot works will be undertaken during periods of Total Fire Ban and Catastrophic Fire Weather Days unless there is a suitable fire suppression unit present on site and only with prior agreement with local fire services.	~	~	Х	X	Applicable across all construction stages.
HR8	All chemicals, fuels or other hazardous substances will be stored in accordance with the supplier's instructions and relevant legislation, Australian Standards and applicable guidelines. The capacity of any bunded area shall be at least 130 per cent of the largest chemical volume contained within the bunded area. The location of the bunded enclosure/s shall be shown on the site plans.	~	¥	Х	X	Applicable across all construction stages.
HR9	Dangerous goods and hazardous substances will be transported in accordance with relevant legislation and codes, including the Dangerous Goods (Road and Rail Transport) Act 2008, Road and Rail Transport (Dangerous Goods) (Road) Regulation 1998 and the Australian Code for the Transport of Dangerous Goods by Road and Rail (National Transport Commission, 2007).	¥	¥	Х	X	Applicable across all construction stages.
HR10	Appropriate spill containment equipment will be provided and located at strategic, accessible locations.	~	\checkmark	Х	Х	Applicable across all construction stages.
HR11	Security measures will be implemented to minimise the risk of arson within and adjoining construction areas. The location of appropriate security measures will be determined using a risk based approach.	~	\checkmark	Х	Х	Applicable across all construction stages.
HR12	All chemicals or other hazardous substances at the Buronga substation will be stored in bunded and weatherproof facilities away from drainage lines, and in accordance with supplier's instructions and relevant legislation, Australian Standards and applicable guidelines. The capacity of the bunded area will be at least 130 per cent of the largest chemical volume contained within the bunded area. The location of the bunded enclosure/s will be shown on the site plans.	X	Х	V	¥	Applicable to operational phase only.



RMM	Requirement	Construction		Operation		Comment
		Stage 1	Stage 2	Line 1	Line 4	
HR13	Emergency spill procedures will be implemented to avoid and manage accidental spillages of fuels, chemicals or fluids during operation and maintenance activities in accordance with the TransGrid's HSE Guideline. Environmental spill kits will be provided at strategic, accessible locations, and staff will be trained in spill response procedures.	X	Х	4	V	Applicable to operational phase only.
HR14	The proposal will be designed, operated and maintained in accordance with TransGrid's Bushfire Risk Management Plan. This includes reduction in fuel loads, management of asset protection zones and inspections of infrastructure.	v	~	~	✓	Applicable across all stages.
HR15	The Buronga substation Emergency Response Manual will be updated to include the new proposed design and required revised emergency response procedures.	Х	Х	V	~	Applicable to operational phase only.
Soils, conta	amination and groundwater					
SCG1	Locations of transmission line structure foundations, and ancillary construction sites will be positioned to avoid disturbance to any known farm dams where practicable.	Х	~	Х	Х	No known farm damns in the vicinity of Stage 1 (construction) disturbance area.
SCG2	Existing areas of waterlogging and poor drainage will be avoided, where possible, with regard to both access tracks and permanent structures.	~	~	Х	X	Applicable across all construction stages.
SCG3	Construction materials will be selected to withstand high saline soil and groundwater environment (where applicable).	~	~	Х	Х	Applicable across all construction stages.
SCG4	A review of additional geotechnical and hydrogeology data, and any publicly available mapping of high priority groundwater dependant ecosystems (GDEs) as documented in the latest relevant water sharing plan, will be carried out to confirm the groundwater conditions and to:	~	✓	Х	Х	Applicable across all construction stages.
	 Getermine if any additional mugation measures are required to limit groundwater inflows, or impacts to GDEs 					
	 confirm no or minimal impact to groundwater sources as per the minimal impact criteria listed within the Aquifer Interference Policy. 					



RMM	Requirement	Construction		Operation		Comment
		Stage 1	Stage 2	Line 1	Line 4	
SCG5	Disturbance to areas of medium risk of contamination will be avoided or minimised where practicable during construction. This includes the position of foundations for transmission line structures and ancillary construction sites. Areas of medium risk of contamination that will be disturbed by construction activities will be further investigated including completion of a site inspection. Where considered to be required, a Phase 2 investigation will be completed in accordance with NEPM 2013. Mitigation measures identified through further investigation will be implemented.	Х	¥	Х	Х	Stage 1 (construction) disturbance area was identified as low contamination risk.
SCG6	To limit the potential for groundwater inflows, the construction methodology for transmission line structure foundations will ensure that excavations will not occur within 40 metres of the Darling River, Great Darling Anabranch or Murray River. Where groundwater may be encountered, the design and construction methodology will be adjusted to minimise groundwater inflows. The depth of groundwater will be confirmed prior to commencement of construction at each relevant transmission line structure locations.	Х	~	Х	Х	The Darling River, Great Darling Anabranch or Murray River are not in the vicinity of Stage 1 (construction) disturbance area.
SCG7	 Direct impacts to registered bores GW088454 (nested), GW087531 and GW600452 will be avoided, where possible. If the bores are: not required to be removed during construction, then they will be clearly demarcated with a 5x5 metre construction exclusion zone are to be removed during construction or unavoidably damaged, then make good provisions will apply in consultation with the registered bore owner. 	Х	~	Х	X	Registered bore GW087531 located on the opposite side of Arumpo Road and outside the indicative Stage 1 (construction) disturbance area.
SCG8	Prior to ground disturbance in areas of potential acid sulfate soil occurrence (e.g. in low lying areas surrounding former or current lakes and river beds), testing would will be carried out to determine the presence of actual and/or potential acid sulfate soils. If acid sulfate soils are encountered, they will be managed in accordance with the Acid Sulfate Soil Manual (ASSMAC, 1998) and TransGrid's HSE Guideline.	Х	~	Х	Х	Stage 1 (construction) disturbance area is not identified as acid sulfate soil risk prone area.



RMM	Requirement	Construction		Operation		Comment
		Stage 1	Stage 2	Line 1	Line 4	
SCG9	 Prior to ground disturbance, a visual inspection will be undertaken for the presence of saline soils. Areas of known or suspected salinity will be subject to further testing as required. If salinity is confirmed, excavated soils will be managed in accordance with Book 4 Dryland Salinity: Productive use of Saline Land and Water (NSW DECC 2008) and the Salinity Training Manual (DPI, 2014) to manage salinity impacts. Erosion controls will be implemented in accordance with The Blue Book (Landcom, 2004). 	*	*	Х	Х	Applicable across all construction stages.
SCG10	Earthworks and construction activities that result in compaction of soils will be limited where possible in areas within 40 metres of the Darling River, Murray River and Great Darling Anabranch to prevent potential impacts to groundwater.	X	~	Х	Х	The Darling River, Great Darling Anabranch or Murray River are not in the vicinity of Stage 1 (construction) disturbance area.
SCG11	A bore condition assessment is to be conducted prior and post construction on GW088454 (nested), GW087531 and GW600452 where required to identify any adverse impact to the bores integrity that may have resulted during construction. If impacts are identified, repair or replacement of the bore will be undertaken in discussion with the registered owner.	~	~	~	V	Applicable across all stages. Post construction condition assessments may be completed prior to the commencement of operations.
SCG12	Construction materials, spoil and waste will be suitably stored to minimise the potential for soil, groundwater or water quality impacts.	~	~	Х	Х	Applicable across all construction stages.
SCG13	The discovery of previously unidentified contaminated material will be managed in accordance with a contamination unexpected finds procedure.	✓	√	Х	Х	Applicable across all construction stages.



RMM	Requirement	Construction		Operation		Comment
		Stage 1	Stage 2	Line 1	Line 4	
SCG14	 The application of treated wastewater will be managed so that: application rates account for soil conditions and the protection of water quality (including groundwater). This includes salinity conditions and the prevention of runoff from application areas buffer distances to sensitive receivers (such as waterways and farm dams) as set out in Designing and Installing On-Site Wastewater Systems (WaterNSW, 2019) are met 	*	~	Х	X	Applicable across all construction stages.
	 climatic conditions are considered during application to ensure treated wastewater is applied to intended areas equipment used will reflect the management of human, livestock and environmental risks. 					
SCG15	Incident response procedures for wastewater treatment plants (and use of treated wastewater) will be implemented to avoid, minimise and manage accidental spills or other incidents that impact the function of the wastewater treatment plants.	✓	*	Х	Х	Applicable across all construction stages.
SG16	A site-specific risk assessment will occur for locations where there is a risk of encountering UXO. The risk assessment will be carried out prior to any activities that could interact with UXO. This will include field verification to validate the historical assessment of UXO contamination and identify appropriate mitigation practices. The risk assessment will occur with input from an appropriate UXO specialist and will identify if and when an explosives engineer is required during site activities.	х	~	Х	X	Identified UXO prone areas are not in the immediate vicinity of Stage 1 (construction) disturbance area.
	An unexpected finds procedure will be implemented. The procedure will specify the actions that site personnel must take to minimise the risk to and from any UXO encountered.					
	The management actions identified in the risk assessment will be implemented prior to and during all relevant site activities. All personnel conducting intrusive works within an identified UXO area will be provided with appropriate safety and awareness briefing(s) prior to the participating in the intrusive works.					
Waste man	agement and resources					
WM1	The proposal will achieve an ISCA verified 'Design' and 'As-built' rating of Excellent under v1.2 of the IS rating tool.	✓	~	Х	Х	Applicable across all construction stages.



RMM	Requirement	Construction		Operation		Comment
		Stage 1	Stage 2	Line 1	Line 4	
WM2	Measures to minimise excess spoil generation will be investigated at detailed design. This will include a focus on optimising the design to minimise spoil volumes and the reuse of material on-site.	~	✓	Х	X	Applicable across all construction stages.
WM3	Opportunities to re-use or recycle construction and demolition waste will be investigated during detailed design.	~	\checkmark	Х	Х	Applicable across all construction stages.
WM4	All waste will be assessed, classified, managed and disposed of in accordance with the Waste Classification Guidelines (NSW EPA, 2014).	~	\checkmark	Х	Х	Applicable across all construction stages.
WM5	Waste streams will be segregated to avoid cross- contamination of materials and maximise reuse and recycling opportunities.	~	\checkmark	Х	Х	Applicable across all construction stages.
WM6	All waste generated and surplus spoil to be removed from the construction of the proposal will be transported to appropriately licensed waste disposal transfer facilities or other facilities lawfully able to accept materials.	✓	✓	Х	Х	Applicable across all construction stages.
WM7	Waste during operations will be managed in accordance with TransGrid's existing Environmental Management System and processes for the identification, classification, handling and management of waste.	Х	Х	✓	✓	Applicable to operational phase.
WM8	All waste will be assessed, classified, managed and disposed of in accordance with the Waste Classification Guidelines (NSW EPA, 2014).	Х	Х	✓	✓	Applicable to operational phase.
Cumulative	impacts					
CI1	Co-ordination of traffic management arrangements between major construction projects will occur in consultation with the relevant road authorities (Transport for NSW and local councils) and/or other proponents as relevant. This will consider any potential conflicts in relation to deliveries and identified haulage routes during the program.	~	✓	X	X	Applicable across all construction stages.