

# Traffic and Transport Management Plan

Snowy 2.0 Transmission Connection Project

Stage 1 Document Number: 3200-0645-PLN-022-TTMP

Stage 2 Document Number: HLW-HLJV-PRW-ENM-PLN-000022

**TransGrid**  
Date 18/03/2025

Snowy 2.0 TCP  
Traffic and Transport Management Plan

## Document Control

## Approvals

<b>Title</b>	Snowy 2.0 Transmission Connection Project – Traffic and Transport Management Plan
<b>Approved on behalf of Transgrid (Snowy 2.0 TLC) by</b>	Mark Perry (A/ Senior Project Manager)
<b>Signed</b>	
<b>Dated</b>	21/03/2025
<b>Approved on behalf of Transgrid HumeLink by</b>	Michael Howard
<b>Signed</b>	
<b>Dated</b>	21/03/2025
<b>Approved on behalf of UGL by</b>	Louis Linde
<b>Signed</b>	
<b>Dated</b>	24/03/2025
<b>Approved on behalf of HLWJV by</b>	Tim Burns
<b>Signed</b>	
<b>Dated</b>	21/03/2025

## Snowy 2.0 TCP Traffic and Transport Management Plan

### Version Control

Revision	Date	Description	Author	Reviewer	Approver
0.01	06/10/2022	Initial issue for review	Ian Rembridge	Darrell Van Bruchem	Trevor Noble
0.02	08/11/2022	Required plan review	Ian Rembridge	Darrell Van Bruchem	Trevor Noble
0.03	12/12/2022	Addressing Heritage NSW and NPWS comments	Ian Rembridge	Darrell Van Bruchem	Trevor Noble
0.04	03/04/2023	Addressing Transgrid and agency comments	Ian Rembridge	Darrell Van Bruchem	Trevor Noble
0.05	14/04/2023	Addressing Transgrid comments	Ian Rembridge	Darrell Van Bruchem	Trevor Noble
0.06	2/08/2023	Addressing agency comments	Ian Rembridge	Darrell Van Bruchem	Trevor Noble
0.07	10/08/2023	Addressing agency comments	Ian Rembridge	Darrell Van Bruchem	Trevor Noble
0.08	24/03/2023	Revised Transgrid Comments	Ian Rembridge	Darrell Van Bruchem	Trevor Noble
0.09	15/05/2023	Revised Transgrid Comments	Ian Rembridge	Darrell Van Bruchem	Trevor Noble
0.10	17/05/2023	Revised Transgrid Comments	Ian Rembridge	Darrell Van Bruchem	Trevor Noble
0.11	20/07/2023	Revised Stakeholder Comments	Ian Rembridge	Darrell Van Bruchem	Trevor Noble
0.12	26/07/2023	Revised Transgrid Comments	Ian Rembridge	Darrell Van Bruchem	Trevor Noble
0.13	17/08/2023	Revised TG and DPE Comments	Ian Rembridge	Darrell Van Bruchem	Tim McCarthy
0.14	30/08/2023	Revised TG and DPE Comments	Ian Rembridge	Darrell Van Bruchem	Tim McCarthy
0.15	05/09/2023	Revised TG and NPWS Comments	Ian Rembridge	Darrell Van Bruchem	Tim McCarthy
0.16	27/09/2023	Revised DPE Comments	Ian Rembridge	Darrell Van Bruchem	Tim McCarthy
0.17	04/05/2024	Revised to Consider Winter Works	Ian Rembridge	Darrell Van Bruchem	Tim McCarthy
0.18	14/06/2024	Revised Stakeholder Comments	Ian Rembridge	Darrell Van Bruchem	Tim McCarthy
0.19	13/08/2024	Address Independent Environmental Audit	Lauren Logue	Brendan Toohey	Tim McCarthy
0.20	26/09/2024	Update to include Stage 2	Ian Irwin	Brendan Toohey	Louis Linde / Tim Burns
0.21	14/02/2025	Update Stakeholder Comments.	Chris Millar	Chris Millar	Louis Linde / Tim Burns
0.22	18/.3/2025	Remove Melbourne Prt from possible OSOM	Chris Millar	Chris Millar	Louis Linde / Tim Burns

Snowy 2.0 TCP  
Traffic and Transport Management Plan

Revision	Date	Description	Author	Reviewer	Approver
		route options			



## Snowy 2.0 TCP Traffic and Transport Management Plan

### Distribution of controlled copies

This Environmental Management Plan is available to all personnel and sub-contractors via the Project document control management system. An electronic copy can be found on the Snowy 2.0 TCP website.

The document is uncontrolled when printed. One controlled hard copy of the CEMP and supporting documentation will be maintained by the Quality Manager at the Project office and relevant documentation is available on the Snowy 2.0 TCP website [Snowy 2.0 Transmission Connection | Transgrid](#)).

Copy number	Issued to	Version

Snowy 2.0 TCP  
Traffic and Transport Management Plan

## Contents

<b>1. Introduction.....</b>	<b>11</b>
1.1. Purpose.....	11
1.2. Scope.....	11
1.3. Consultation .....	13
<b>2. Project Site Representatives.....</b>	<b>15</b>
<b>3. Emergencies .....</b>	<b>16</b>
<b>4. Approvals.....</b>	<b>17</b>
<b>5. Notifications.....</b>	<b>23</b>
5.1. Relevant City Council and NSW Roads.....	23
5.2. Police and Emergency Services .....	23
5.3. Consultation .....	24
5.4. Monitoring and Reporting .....	28
<b>6. Construction Area Speed Zones .....</b>	<b>29</b>
<b>7. Traffic Mitigation and Management Measures.....</b>	<b>30</b>
<b>8. Main Site Office and Laydown Areas .....</b>	<b>37</b>
8.1. Construction and Laydown Areas.....	37
8.2. Spoil Management .....	37
8.3. Project Vehicle Parking .....	38
8.4. Project Activities – Mobile Plant and Equipment.....	38
8.5. Inspection and Review Process .....	38
8.6. Towing of Equipment.....	38
<b>9. Transportation .....</b>	<b>39</b>
9.1. Haulage Routes .....	39
9.2. Transport Strategy .....	39
9.3. Road Maintenance (Local Roads) .....	40
9.4. Local Road Access .....	41
<b>10. Safety.....</b>	<b>43</b>
10.1. Pedestrian Management .....	43
10.2. Traffic Management .....	43
10.3. Safe Driving Requirements.....	45
10.4. Incident Management.....	46

## Snowy 2.0 TCP Traffic and Transport Management Plan

<b>11. Environmental</b> .....	<b>47</b>
<b>12. Traffic Control Devices</b> .....	<b>48</b>
<b>13. Fatigue Management</b> .....	<b>49</b>

### Figures and Tables

Figure 1 Showing the Transmission Line Location East of Talbingo Reservoir .....	12
Figure 2 Showing the Transmission Line Location and Maragle Substation Site West of Talbingo Reservoir .....	13
Figure 3 Emergency Access for Eastern Transmission Line Project Area .....	24
Figure 4 Heavy Vehicle Route .....	58
Tables	
Table 1-1 Stakeholder Consultation Summary.....	13
Table 2-1 Contact Details .....	15
Table 4-1 Project Conditions of Approval Relevant to the TTMP .....	17
Table 5-1 Ongoing consultation requirements for the TTMP .....	24
Table 5-2 Communication and Engagement Tools and Channels .....	25
Table 5-3 Engagement and Communication Action Plan .....	26
Table 7-1 Traffic Management Measures .....	30
Table 9-1 Schedule of Road Upgrades.....	41

### Appendices

Appendix A:	Aboriginal Heritage Management Plan
Appendix B:	Historic Heritage Management Plan
Appendix A	Traffic Management Plan and Planning Tool
Appendix B	Example Traffic Management Diagrams
Appendix C	Fatigue Management Procedure
Appendix D	Snow & Ice Traffic Management Plan
Appendix E	Heavy Vehicle Salvage Plan
Appendix F	Marine Transport Management Plan
Appendix G	Turn Out for Elliott Way
Appendix H	References
Appendix I	UGL Chain of Responsibility Procedure
Appendix J	Driver Code of Conduct for Stage 1
Appendix K	Driver Code of Conduct for Stage 2

Snowy 2.0 TCP  
Traffic and Transport Management Plan

Appendix L OSOM Bridge Assessment Report

Appendix M: Transgrid's NHVR Permit

Appendix N Rev 20 Comment close out



## Snowy 2.0 TCP Traffic and Transport Management Plan

### Definitions

Term	Definition
Aboriginal Object	Any deposit, object, or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains
Compliance audit	Verification of how implementation is proceeding with respect to a Construction Environmental Management Plan (CEMP) (which incorporates the relevant approval conditions).
Contractor or Principal Contractor	Stage 1 of the scope of works for design and construction the Contractor or Principal Contractor is UGL Pty Ltd Stage 2 of the scope of works for design and construction the Contractor or Principal Contractor is UGL/CPB Joint Venture. Any reference to the 'Contractor' relates to the activities of both appointed Contractors (UGL and UGL/CPB Joint Venture), but only as is relevant to the appointed stage of works.
Environmental aspect	Defined by AS/NZS ISO 14001:2015 as an element of an organisation's activities, products or services that can interact with the environment.
Environmental impact	Defined by AS/NZS ISO 14001:2015 as any change to the environment, whether adverse or beneficial, wholly, or partially resulting from an organisation's environmental aspects.
Environmental incident	An unexpected event that has, or has the potential to, cause harm to the environment and requires some action to minimise the impact or restore the environment.
Environmental objective	Defined by AS/NZS ISO 14001:2015 as an overall environmental goal, consistent with the environmental policy, that an organisation sets itself to achieve.
Environmental policy	Statement by an organisation of its intention and principles for environmental performance.
Environmental target	Defined by AS/NZS ISO 14001:2015 as a detailed performance requirement, applicable to the organisation or parts thereof, that arises from the environmental objectives and that needs to be set and met in order to achieve those objectives.
Environmental Representative	A suitably qualified and experienced person independent of Snowy 2.0 Transmission Line Project design and construction personnel employed for the duration of construction. The principal point of advice in relation to all questions and complaints concerning environmental performance.
Snowy 2.0 Transmission Line Approvals	Snowy 2.0 Transmission Line approvals include: Snowy 2.0 Transmission Line Infrastructure Approval NSW SSI 9717 Snowy 2.0 Transmission Line EPBC Approval Cth EPBC 2018/8363
Non-compliance	Failure to comply with the requirements of the HumeLink Approvals or any

Snowy 2.0 TCP  
Traffic and Transport Management Plan

Term	Definition
	applicable licence, permit or legal requirements.
Non-conformance	Failure to conform to the requirements of HLW system documentation including this CEMP or supporting documentation.
Planning Approval Documentation	The NSW planning approval documents, as they relate to the Snowy 2.0 Transmission Line and as listed in CoA A2 of the NSW Infrastructure Approval for HumeLink (SSI 9717)
Principal, the	Transgrid
Synergy	UGL-CMS incident management software program to manage, report, record and take action on emergency and incidents.

## Snowy 2.0 TCP Traffic and Transport Management Plan

### Abbreviations

Term	Definition
<b>CEMP</b>	Construction Environmental Management Plan
<b>COA</b>	Conditions of Approval
<b>CSSI</b>	Critical State Significant Infrastructure
<b>DPE</b>	Department of Planning and Environment
<b>DPI</b>	Department of Primary Industries
<b>EPA</b>	Environment Protection Authority
<b>EPL</b>	Environmental Protection License
<b>EMS</b>	Environmental Management System
<b>EP</b>	Emergency Plan
<b>FCNSW</b>	Forestry Corporation NSW
<b>FGJV</b>	Future Generation Joint Venture
<b>FRNSW</b>	Fire and Rescue NSW
<b>HSSE</b>	Health, Safety, Security and Environment
<b>HVNL</b>	Heavy Vehicle National Law
<b>KM</b>	Kilometres
<b>KNP</b>	Kosciuszko National Park
<b>KV</b>	Kilovolts
<b>MTCP</b>	Marine Traffic Control Plans
<b>MW</b>	Megawatt
<b>MWH</b>	Megawatt hours
<b>NEM</b>	National Electricity Market
<b>NPWS</b>	National Parks and Wildlife Service
<b>NSW</b>	New South Wales
<b>OPGW</b>	Optical Fibre Ground Wire
<b>OSOM</b>	Oversize Overmass
<b>PC</b>	Principal Contractor
<b>RFS</b>	Rural Fire Service
<b>SHL</b>	Snowy Hydro Limited
<b>TfNSW</b>	Transport for New South Wales
<b>UGL</b>	UGL Engineering Pty Ltd
<b>WHS</b>	Work Health and Safety

Snowy 2.0 TCP  
Traffic and Transport Management Plan

## 1. Introduction

### 1.1. Purpose

This Traffic and Transport Management Plan (TTMP) sets out requirements for the management of traffic associated with the Maragle Project scope of works in order to optimise safe vehicle movement and transportation of people, equipment and materials.

This plan is based on the requirements as set in Australian Standard 1742.3-2019 and will be used to provide authorisation of all actions in relation to traffic management. This document and subsequent iterations will be made available to the client for the purposes of reviewing and auditing. It also addresses all Conditions of Approval.

The aim of this TTMP is to notify Transgrid, relevant roads authorities managers, Principal Contractor (PC) project staff, subcontractors, site personnel and the local public of changes to traffic conditions and to guard against operations which may pose a hazard to traffic.

Access protocols within Kosciuszko National Park (KNP) will be undertaken in accordance with the Agreement for the Grant of Easement and Access Licence for Construction and associated Network Access Plan between Transgrid and NPWS.

Transgrid will obtain approved forest access permits from Forestry Corporation NSW (FCNSW) prior to utilising the FCNSW road network, inclusive of Bago and Maragle State Forests. Permits must be issued prior to utilising new or existing FCNSW roads for any use including alternate routes for the Project and must satisfy long-term road maintenance and funding responsibilities following construction within the FCNSW road network.

This TTMP will be used to ensure a safe interface between construction vehicles and other road users during:

- Construction works for the Maragle Project
- Delivery of plant and equipment
- Transporting PC staff and subcontractors to site.

### 1.2. Scope

The Scope of Works is for the design and construction of Maragle 500kV Substation including the 330kV Switching Yard (Maragle Substation) and 330kV Transmission Line Connections.

- Design and construction of Maragle Substation and supporting works.
- Design and construction of two 330kV transmission lines, cut into Line 64, the installation of Optical Fibre Ground Wire (OPGW) on a section of Line 64, and supporting works.

The work under the Contract shall be designed, procured and constructed such that the Maragle Substation, transmission lines and associated works are constructible, operable and maintainable for their design life. The work under the Contract must be designed to take into account the specific site conditions, including extreme weather conditions over the specified design life, refer to the Project Specific Design Criteria available in Part 3 – TL – Project Documents.

It is proposed that the delivery of the relevant plans and strategies be delivered in two stages and address the following activities:

Stage 1 – All activities associated with the construction and operation of infrastructure related to the 330 kV grid connection, including:

- All civil works associated with the new substation in Bago State Forest and the



## Snowy 2.0 TCP Traffic and Transport Management Plan

construction/installation of infrastructure associated with the 330 kV component of the substation.

- Two new 9 km long 330 kV double-circuit overhead transmission lines from the Snowy 2.0 cable yard in Lobs Hole, National Park to a new substation.
- 330 kV grid connection between the new substation and Transgrid's existing Line 64.
- Upgrade and widening of an existing access road off Elliott Way to the substation.
- Ancillary construction activities, including the establishment of tensioning and pulling sites for conductor and earth wire stringing, crane pads, site compounds and equipment laydown areas, water extraction and the transport and haulage of equipment and waste to and from the project area.

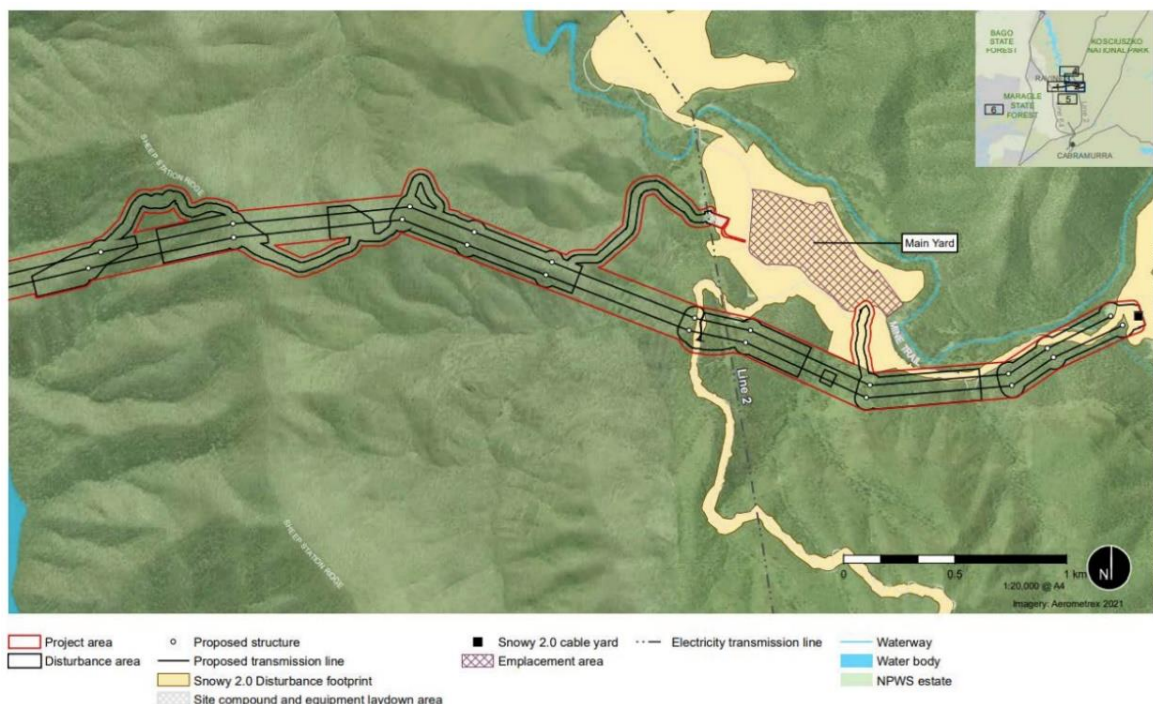
Stage 2 – All activities associated with the construction and operation of infrastructure related to the 500 kV component of the substation, including:

- The delivery of oversize/overmass (OSOM) components, construction/installation of infrastructure associated with the 500 kV component of the new substation in Bago State Forest (i.e., transformers, reactors, switchbays).

This management plan has been amended to address both Stage 1 and the Stage 2 of the Project.

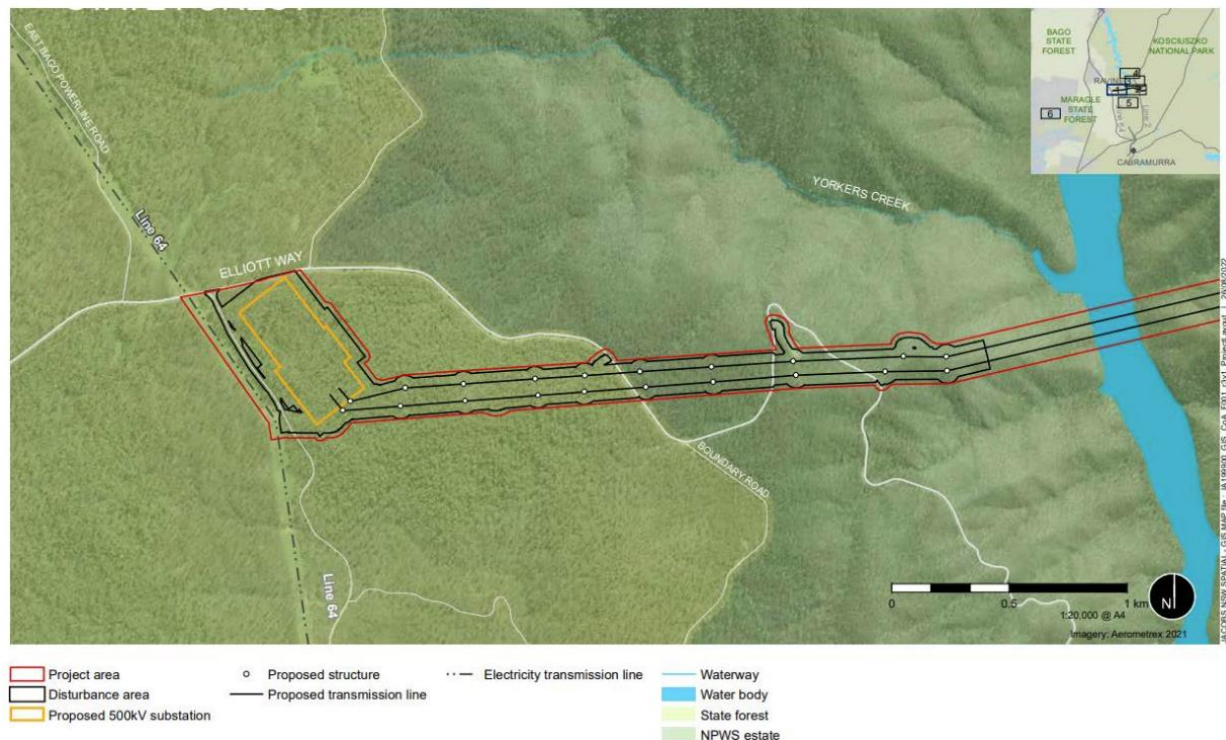
The upgrade of roads and bridges to facilitate the transport of OSOM 500 kV componentry to the substation.

Figure 1 Showing the Transmission Line Location East of Talbingo Reservoir



## Snowy 2.0 TCP Traffic and Transport Management Plan

Figure 2 Showing the Transmission Line Location and Maragle Substation Site West of Talbingo Reservoir



### 1.3. Consultation

The following table outlines consultation undertaken with stakeholders in preparation of this TTMP in accordance with CoA B27.

Table 1-1 Stakeholder Consultation Summary

Stakeholder	Date	Consultation Undertaken	Outcome
National Parks and Wildlife Service	28-Nov-22	Transgrid provided TTMP for comment to NPWS	NPWS feedback on Rev 0.03 of TTMP has been incorporated into document in its entirety
Forestry Corporation NSW	28-Nov-22	Transgrid provided TTMP for comment to FCNSW	No response received
	14-Apr-23	Transgrid provided revised (rev0.08) TTMP for comment to FCNSW	FCNSW feedback on Rev 0.03 of TTMP has been incorporated into document in its entirety
Roads and Maritime Services	28-Nov-22	Transgrid provided TTMP for comment to RMS	RMS feedback on Rev 0.03 of TTMP has been incorporated into document in its entirety
Snowy Valleys Council	28-Nov-22	Transgrid provided TTMP for comment to SVC	SVC approval of TTMP received
	19-Sept-24	Transgrid provided TTMP (including Stage 2) for comment to SVC	SVC replied via email on the 5 <sup>th</sup> November 2024 accepting the updates to the TTMP and TMS
Snowy Monaro Regional Council	03-Nov-22	Emailed SMRC to request contact person for TTMP	No response received

## Snowy 2.0 TCP Traffic and Transport Management Plan

Stakeholder	Date	Consultation Undertaken	Outcome
	28-Nov-22	Transgrid provided TTMP for comment to SMRC	SMRC advised no further comments
NSW Police	28-Nov-22	Transgrid provided TTMP for comment to NSW Police	No response received
	12-Apr-23	Transgrid provided revised TTMP (rev0.08) for comment to NSW Police.  NSW Police distributed to HWP Stakeholders.	NSW Police advised no further comments. HWP Stakeholders no comments.
Transport for NSW	28-Nov-22	Transgrid provided TTMP for comment to TfNSW	TfNSW have no comment on stage 1 of the works.
	12-Apr-23	Transgrid provided revised (rev0.08) TTMP for comment to TfNSW	TfNSW have no comment on stage 1 of the works.
	08-May-23	Transgrid attempted phone contact with TfNSW to obtain feedback. Voicemail left.	TfNSW returned call advising feedback to be provided by 12 May. TfNSW have no comment on stage 1 of the works.
	15-May-23	Transgrid attempted phone contact with TfNSW to obtain feedback. Voicemail left.	TfNSW have no comment on stage 1 of the works.
	19-Sept-24	Transgrid provided TTMP for comment to TfNSW	TfNSW requested information on OSOM vehicles and use of heavy haulage routes.
	12-Feb-25	Teams meeting to discuss response to TfNSW request	TfNSW will respond through portal regarding the timing to address OSOM and heavy haulage information.
	20-Mar-25	Further Teams meeting clarifying TfNSW comments dated 6 March 2025.	Agreement from TfNSW that all high risk OSOM will be removed from Rev 22 of this plan and is to be addressed in a later revision.

Feedback and comments received in relation to Rev 20 are contained in Appendix N.

## Snowy 2.0 TCP Traffic and Transport Management Plan

## 2. Project Site Representatives

Table 2-1 Contact Details

Entity	Contact Name	Contact Number
<b>Stage 1 Project Personnel</b>		
Project Manager	Tim McCarthy	0455 087 248
Construction Manager	Darrell Van Bruchem	0447 307 244
Project HSE Manager	Ian Rembridge	0466 517 794
Project Enviro Manager	Brendan Toohey	0488 951 736
<b>Stage 2 Project Personnel</b>		
Project Director	Tim Burns	0417 759 637
Construction Director	Alan Foote	0448151854
Project HS Manager	Andrew Bruce	0455 081 843
Project Enviro Manager	Jeremy Slattery	0421 827 231
<b>Authorities</b>		
Snowy Valley Council	info@svc.nsw.gov.au	1300 275 782
FGJV	www.futuregenerationjv.com.au/contact	1800 766 992
NPWS	snowy.20@environment.nsw.gov.au	0419 400 550 (NPWS Snowy 2.0 Manager) After Hours 1800 629 104
FCNSW	Forestry Corporation NSW	02 9872 0111
Transport for NSW	service.nsw.gov.au	13 77 88
Local Police	Tumbarumba Police Station	(02) 6948 2044
Emergency	Police, Fire, Ambulance	000/112

Additional emergency contact details are included in the Project Emergency Plan. Specific traffic control diagrams shall be prepared for the following scenarios and included in Appendix B. Updates to these diagrams will be made as conditions change and will be distributed to all affected stakeholders.

- Construction access around the Laydowns and Work areas
- Site office traffic management arrangements
- Stringing activities over or in proximity to existing roadways (Supplementary side roads to controlled and managed with specific work instructions)
- Access from Elliott Way.



### 3. Emergencies

In the event of an emergency, the Construction Manager will be immediately advised of the event and the Principal Contractor (PC) Emergency Plan will be actioned. Traffic management will be mobilised as required and equipped with electronic communications (UHF Radio / mobile phones) to contact and liaise with emergency services ensuring a prompt response. Once mobilised, the PC's will communicate site access locations to local emergency services. The specific access point will be advised as part of the event notification. The PC's Interface Plans (UGL – 3200-0645-PLN-030-ETL-IMP and UGL/CPB Joint Venture – HLW-HLJV-PRW-IF-PLN-00000X.00.IFC) will be followed to interface with relevant third parties.

## Snowy 2.0 TCP Traffic and Transport Management Plan

### 4. Approvals

Approvals shall be obtained from the TfNSW, Snowy Valley Council, NPWS, and FCNSW prior to the implementation of traffic controls if required. Notification for temporary closure of roads or expected traffic delays will be communicated to any affected parties.

Generally, it is expected approvals maybe required for the following activities:

- Implementation of specific traffic management plans on public road for transmission line road cross overs as required.
- Bridge load assessments will be carried out in conjunction with the OSOM permit application process for all bridges to be crossed by vehicles accessing site in the local area.

Table 4-1 Project Conditions of Approval Relevant to the TTMP

Reference number	Requirement	Document Reference
<b>Conditions of Approval</b>		
<b>Designated Heavy and Over-Dimensional Vehicle Routes</b>		
B25	All heavy vehicles requiring escort 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 4, unless the Planning Secretary agrees otherwise.  Note: 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.	Appendix A Fig 4 Section 9.1
B26	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 4; and (b) may travel to and from the site via the Secondary Access may travel to and from the site via the Secondary Access Routes and Water Supply Routes, subject to the requirements in condition B31, to the satisfaction of the relevant roads authority/manager. unless the Planning Secretary agrees otherwise.	Appendix A Fig 4 Maragle Substation and Western Transmission Line traffic will access via Elliott Way, Lobs Hole traffic via Link Rd.
<b>Transport Strategy</b>		
B27	Prior to commencing construction in Project Area West, the Proponent must prepare a Transport Strategy, in consultation with the relevant roads authority/manager, to the satisfaction of the Planning Secretary, which: (a) identifies the location and type of any necessary road upgrades (including roads, intersections, crossing points, bridges and access points), including consideration of relevant amenity impacts; (b) ensures that any road upgrades comply with the Austroads Guide to Road Design (as amended by TfNSW supplements), unless the relevant road authority agrees otherwise; (c) includes a detailed assessment of potential impacts of any necessary road upgrades (such as heritage and biodiversity impacts), including consideration of appropriate mitigation measures;	Section 9.2. Only upgrade will be Maragle Substation access point, nil effect to Elliott Way.

Snowy 2.0 TCP  
Traffic and Transport Management Plan

Reference number	Requirement	Document Reference
	(d) identifies whether intersections, crossing points and access points would be permanent or temporary; and (e) includes measures or notifying, seeking feedback from and addressing the concerns of impacted residents along the route;	
B28	Prior to commencing construction in Project Area West, the proponent must implement the road upgrades and the mitigation measures identified in the Transport Strategy in condition B27, to the satisfaction of the relevant roads authority/manager.	Section 9.2. Transport Strategy
<b>Road Maintenance</b>		
B29	<p>The Proponent must:</p> <p>(a) undertake an independent dilapidation survey to assess the:</p> <p>(i) existing condition of all local roads on the transport route shown in the figure in Appendix 4 (including local road crossings) prior to construction, upgrading or decommissioning works; and</p> <p>(ii) condition of all local roads on the transport route (including local road crossing):</p> <ul style="list-style-type: none"> <li>• within 1 month of the completion of construction, upgrading or decommissioning works, or</li> <li>within a timeframe agreed to by the relevant roads authority/manager;</li> <li>• on an annual basis during construction, or within a timeframe agreed to by the relevant roads authority/manager;</li> </ul> <p>(b) repair (or pay the full costs associated with repairing) any damage to local roads on the transport route (including local road crossings):</p> <p>(c) rehabilitate and/or make good any development related damage:</p> <p>(i) identified during the construction and/or decommissioning works if it could endanger road safety, as soon as possible after it is identified but within 7 days at the latest, unless the relevant road authority/manager agrees otherwise; and</p> <p>(ii) identified in any dilapidation survey completed after the construction, upgrading or decommissioning works within 2 months of the completion of the survey to the satisfaction of the relevant roads authority/manager</p>	A Road Dilapidation Report to be compiled Section 9.3
<b>Vehicle Restrictions</b>		
B30	<p>The Proponent must:</p> <p>(a) restrict development-related vehicle speeds on Lobs Hole Ravine Road, Mine Trail Road and within the site to 30 km/h between sunset and sunrise, unless the Planning Secretary agrees otherwise;</p> <p>(b) restrict the use of Elliott Way inside KNP to no more than 8 heavy vehicles per day, for water cartage purposes only from the Snowy</p>	<p>Section 9.1 Haulage Routes</p> <p>Section 10.2 Traffic Management</p>

Snowy 2.0 TCP  
Traffic and Transport Management Plan

Reference number	Requirement	Document Reference
	Hydro T2 Tailbay site; (c) restrict development-related vessel speeds on Talbingo Reservoir to current TfNSW speed limits.	
<b>Permanent Bridge – Sheep Station Creek</b>		
B31	The Proponent must ensure that any temporary and the permanent bridge over Sheep Station Creek is designed and constructed to comply with the relevant requirements of the: (a) Relevant Austroads Standards (such as elevating them above the 1% AEP flood level); (b) Guidelines for Controlled Activities on Waterfront Land (NRAR, 2018); and (c) Policy and Guidelines for Fish Habitat Conservation (DPI, 2013) and Why do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (NSW Fisheries, 2003).	Section 9.2. Transport Strategy
<b>Traffic and Transport Management Plan</b>		
B32	Prior to commencing construction or road upgrades identified in condition B27 (whichever comes first), the Proponent must prepare a Traffic Management Plan for the development in consultation with FCNSW, NPWS, TfNSW, Snowy Valleys Council, Snowy Monaro Regional Council and NSW Police, and to the satisfaction of the Planning Secretary. This plan 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 B27 of this approval; (c) details of the measures that would be implemented to comply with the transport management requirements in conditions B25 to B30 above;	This Plan 3200-0645-PLN-022-TTMP  a) Appendix A Fig 4  b) Appendix G  c) Sections 9 ,10, Appendix A Fig 4
	(d) details of the measures that would be implemented to: (i) 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 B29 of this approval;	(i) This plan  Section 5.1 & Section 9.3
	• a description of the proposed measures for managing traffic flow around the work sites, construction compounds and accommodation camp;	Section 7 TTMP6
	• scheduling heavy vehicle movements to avoid peak periods; • minimising convoy lengths;	Section 9.1 & TTMP5
	• reducing the speeds of development-related traffic at key intersections along the Snowy Mountains Highway, including the Link	Section 7 TTMP6

Snowy 2.0 TCP  
Traffic and Transport Management Plan

Reference number	Requirement	Document Reference
	Road intersection;	
	• temporary traffic controls, including detours and signage;	Section 7 TTMP6, Section 10.2
	• procedures for stringing cables and transmission lines across roads and Talbingo Reservoir;	Section 7 TTMP11
	• notifying the local community about development-related traffic impacts;	Section 1.1, 5.1 & 5.3
	• procedures for receiving and addressing complaints from the community about development related traffic;	Section 5.3
	• minimising potential cumulative traffic impacts with other projects in the area;	Section 5.1 and 10.2
	• minimising potential conflict between development-related traffic and rail services, stock movements and school buses, in consultation with local schools, including preventing queueing on the public road network;	Section 5.1 and 10.2
	• minimising impacts to the public using Talbingo Reservoir and any water related infrastructure such as the O'Hares campground boat ramp;	Section 10.2, Appendix F & Section 7 TTMP
	• implementing measures to minimise development-related traffic on the public road network outside standard construction hours;	Section 11
	• minimising dirt and debris tracked on to the public road network from development related traffic;	Section 6, 8.2 & ESCP
	• details of the employee shuttle bus service, including pick-up and drop-off points and associated parking arrangements for construction workers, and measures to encourage employee use of this service;	Section 8.4
	• encouraging car-pooling or ride sharing by employees;	Section 9
	• scheduling the haulage vehicle movements to minimise convoy lengths or platoons;	Section 10.2
	• responding to local climate conditions that may affect road safety, such as snow, ice, fog, dust, wet weather and flooding;	Appendix D Snow and Ice Traffic Management Plan.
	• ensuring loaded vehicles entering or leaving the site have their loads covered or contained and leave site in a forward direction;	Section 6 Appendix J & K Driver Code of Conduct for Maragle Project
	• responding to any emergency repair or maintenance requirements;	Section 9.3
	• provisions for maintaining access to the site for FCNWS, NPWS and emergency vehicle access to the site at all times;	Section 5.2
	• a traffic management system for managing over-dimensional vehicles; and;	Appendix A, Figure 4
	• fatigue management	Section 10.3, 13, Appendix C and Appendix

Snowy 2.0 TCP  
Traffic and Transport Management Plan

Reference number	Requirement	Document Reference
		D
	(ii) minimize the impacts of the road and intersection upgrades of the development;	Section 9.2
	(iii) provide sufficient parking on site for all vehicles and ensure vehicles associated with the development do not park on the public road network;	Section 8.3
	(iv) maintain all roads and water-related infrastructure on site in a safe and serviceable condition;	Section 9
	(v) minimise traffic noise impacts of the development	Section 9
	(e) details of the haulage of spoil to be disposed within Kosciuszko National Park in accordance with condition B7	Section 8.2 3200-0645-PLN-020-CEMP-SMP Spoil Management Plan
	(f) ensure any vessel or structure occupying waters must display appropriate shapes and lights in accordance with the Marine Safety (Domestic Commercial Vessel) National Law 2012	Appendix F – Marine Traffic Management Plan Section 12.1
	(g) include a detailed: (i) Heavy Vehicle Salvage Plan;	Appendix E Heavy Vehicle Salvage Plan
	(ii) Driver's Code of Conduct;	Appendix J & K Driver Code of Conduct for Maragle Project
	(iii) Marine Transport Management Plan;	Appendix F Marine Transport Management Plan
	(iv) Snow & Ice Traffic Management Plan;	Appendix D Snow & Ice Traffic Management Plan
	(v) Communication Strategy to keep the public informed about the impacts of the development;	Section 5.3
	(h) include a program to: (i) ensure drivers working on the development receive suitable training on the code of conduct and any other relevant obligations under the Traffic Management Plan;	Section 10.3, Appendix J & K & L
	(ii) record and track vehicle movements; and	Section 9.4, 10.2, Appendix D Section 6
	(iii) monitor and publicly report on the effectiveness of these measures.	Section 10.4, Appendix D Section 6
<b>Long-Term Road Strategy – Kosciuszko National Park</b>		
B33	Within 2 years of the commencement of construction, unless the Planning Secretary agrees otherwise, the Proponent (Transgrid) must prepare a Long-Term Road Strategy for the development to the satisfaction of NPWS. This strategy must: (a) identify the road network within the Kosciuszko National Park	Long-Term Road Strategy to be Developed by Transgrid Within 2 Years of the commencement of construction.  The Proponent commits to



Snowy 2.0 TCP  
Traffic and Transport Management Plan

Reference number	Requirement	Document Reference
	<p>required for the development during operations, including the detailed specifications for this road network;</p> <p>(b) identify which roads within the Kosciuszko National Park can be narrowed or closed following construction and then rehabilitated;</p> <p>(c) include a detailed program for the rehabilitation of these roads, which can be incorporated into the Rehabilitation Management Plan for the development; and</p> <p>(d) identify future road maintenance and funding responsibilities for the long-term road network following construction.</p> <p>Following the Planning Secretary's approval, the Proponent must implement the Long-Term Road Strategy</p>	<p>preparing Long-Term Road Strategy within 2 years of the commencement of construction</p>

## 5. Notifications

### 5.1. Relevant City Council and NSW Roads

FCNSW, NPWS, TfNSW, Snowy Valleys Council, Snowy Monaro Regional Council and NSW Police will be notified through the consultation process, prior to any oversize traffic movement in and out of the construction site as per NSW requirements. (i.e., cranes, large deliveries, convoy lengths) and appropriate signage posted. No Road Occupancy Licences will be required on the Project. This will be communicated through permit applications as necessary from all necessary road authorities, regular consultation and interface meetings with all Major Stakeholders.

Elliott Way is used by the school bus up to Bradley's Drive. Approx. 7:30-8:30am and 3:30-4:30pm school days, the PC will prioritise scheduling deliveries and major traffic movements outside these times.

Link Road approaches to the FGJV Site entrance is prone to ice and slippery conditions, care is advised and Ch40 to be monitored for local updates on approach. Other sections of road prone to snow and ice include all roads between Batlow and Tumbarumba, Elliott Way and the Snowy Mountains Highway between Adaminaby and Talbingo.

The Project will limit its transport footprint by utilising a bus to transport staff into Lobs Hole as a measure to mitigate potential interactions of construction traffic with public 'skiing/snow-season-sport-related' traffic.

A comprehensive dilapidation report will be compiled to assess the condition of local access roads on the transport route before and annually during construction works and on completion of construction works.

### 5.2. Police and Emergency Services

Local police, ambulance, firefighting, and emergency services will be notified in the rare case a delivery brought onto site poses a risk to the operation of emergency services, local traffic movement, or the local community i.e., temporary road closure.

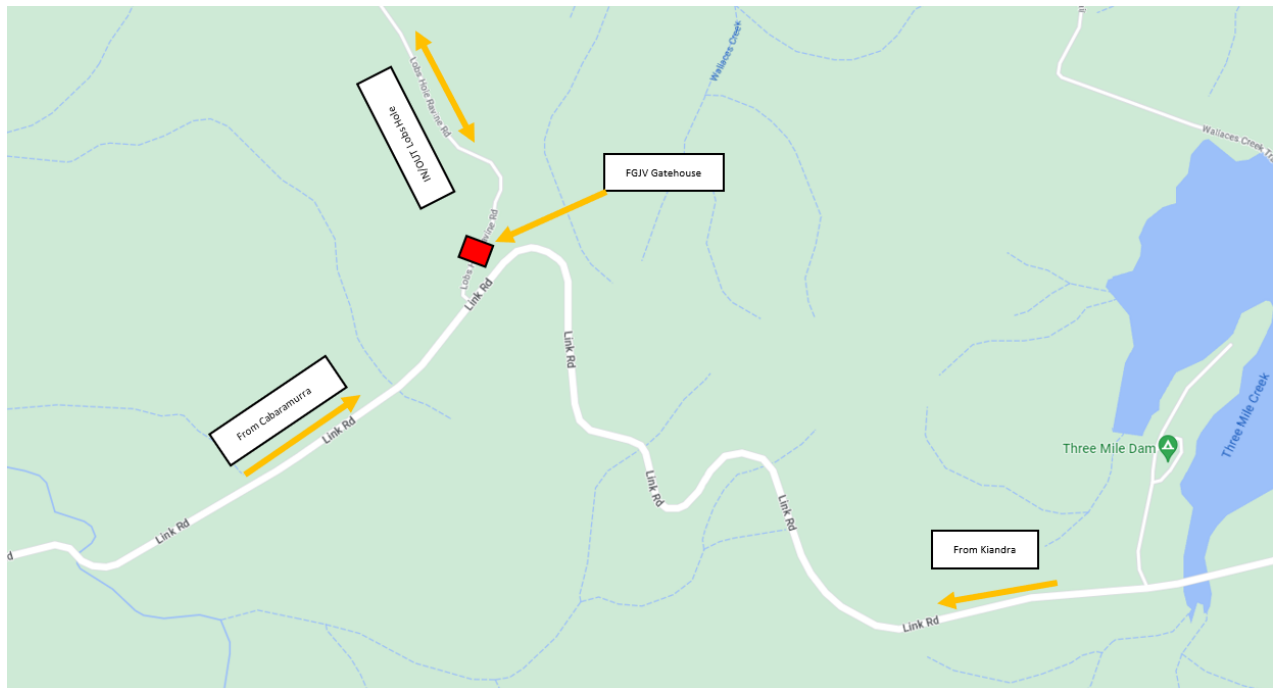
Emergency Services will be consulted prior to commencement of construction and site location and access details provided including maps and emergency contacts.

24 hr access for Emergency Services and NPWS/FCNSW shall be maintained with removable temporary fencing or open access, signage with contact details will be posted (PC signage).

In an emergency on the Eastern Transmission Line Project Area, Emergency Services will be given access from Link Road into Lobs Hole Ravine Road by FGJV gate staff and escorted to the Stage 1 Lobs Hole site. See below map.

## Snowy 2.0 TCP Traffic and Transport Management Plan

Figure 3 Emergency Access for Eastern Transmission Line Project Area



### 5.3. Consultation

Consultation to date has been held with Transgrid, FGJV, SHL, Local Emergency Services, NPWS TfNSW and FCNSW. Further consultation is to be held periodically, fortnightly with the Client, quarterly with the LEMC and as required for extraordinary meetings.

Subject to consultation the following line items will be submitted for approval prior to the implementation of this plan.

Table 5-1 Ongoing consultation requirements for the TTMP

Requirement	Timing
Maragle Substation and Lobs Hole Access Traffic Control Plans agreed by NPWS and FCNSW in Appendix A Figure 3	Prior to possession of the site
Maragle Substation and Lobs Hole Access Traffic Management Diagrams agreed by NPWS and FCNSW in Appendix B Figure 4	Prior to possession of the site
Detailed Stringing Methodology procedures agreed by NPWS	Prior to stringing cables and transmission lines across road and Talbingo Reservoir
Confirmation of VHF radio channel	Prior to any working construction vessels being utilised

## Snowy 2.0 TCP Traffic and Transport Management Plan

### External Communications

Regular consultation and communication meetings will be scheduled and minuted/retained with all Major Stakeholders, the local community and relevant Councils (monthly Council meetings) in accordance with the Transgrid Stakeholder and Community Liaison Plan to liaise, publicly report on and coordinate construction activities and the effectiveness of control measures. Quarterly meetings with the Snowy Valleys Local Emergency Management Committee will be attended by the PC Project management to communicate Project impacts to all attendees and Local Council for communication to the Public. Also, at significant milestones that will impact any Major Stakeholders and the local community.

### Traffic Engagement and Communication Plan

The Traffic Engagement and Communication Plan outlined below aims to highlight the communication strategy that will be implemented across the project to ensure that all public stakeholders are notified of ongoing impacts and changes of the development. Frequency and communication methods have been addressed as per conditions B32(d) and (g) of Schedule 2 of the Conditions of Approval, detailing timelines, specific participants and communication methods.

### Target Audiences

**Engagement** – regular in-person meetings, the purpose of which is to share information and collaborate to identify issues and design solutions that balance the needs of the project and the community.

- Snowy Valleys and Snowy Monaro Councils
- Emergency Services – including Ambulance, Police, Fire Brigade, Rural Fire Service, SES
- NSW State Government MPs
- National Parks
- Forestry Corporation of NSW

**Communication** – regular information shared with groups across the community with common interests. The purpose is to keep people informed and create opportunities to provide feedback.

- Local transport services
- Local industries that rely on transport routes (eg. Apple growers)
- Chambers of Commerce
- Locally Based Tourism Groups
- Visitor Information Centres
- General community and visitors
- Community members who own property along high volume traffic routes
- Roads and Maritime Services

Table 5-2 Communication and Engagement Tools and Channels

Method	Purpose and frequency
<b>Communication</b>	
Phone and email contacts	1800 674 022 or <a href="mailto:communities@lumea.com.au">communities@lumea.com.au</a> : Continuous and ad hoc contact points, allow communication with the project team and facilitate community feedback.

## Snowy 2.0 TCP Traffic and Transport Management Plan

Method	Purpose and frequency
<b>Project newsletter or video</b>	Provide project progress updates and news to landowners, community and other stakeholders at regular intervals. Traffic management a focus in early newsletters and at relevant times throughout the project.
<b>Project fact sheets</b>	Plain-English explanations of technical process through project development and delivery. Specific Traffic Fact Sheets at relevant times throughout the project.
<b>Website</b>	Project website designed to provide general information about the Project and facilitate feedback process. Traffic update page as the single source of truth for traffic activity.
<b>Public displays</b>	Share project information and provide updates – local libraries.
<b>Local Media</b>	Media releases and advertisements to advise traffic management plans at relevant times throughout the project.
<b>Social media channels</b>	Provide project progress updates and news at regular intervals. Collaborate with Council and local community groups to share information via local social media sites.
<b>Engagement</b>	
<b>Briefings (MPs)</b>	Regular briefings on project status and potential impacts, providing mechanism for feedback and collaboration.
<b>Briefings (local councils and project stakeholders)</b>	Regular briefings on project status and potential impacts, providing a mechanism for feedback and collaboration. Traffic management is a standing agenda item. Minimum quarterly.
<b>Briefings Emergency Services</b>	Emergency Services organisations and stakeholders will be offered regular briefings on the project status and its potential impacts, providing a mechanism for feedback and collaboration. Traffic management is a standing agenda item. Minimum quarterly.

Table 5-3 Engagement and Communication Action Plan

Activity	Timing/ Frequency	Target Stakeholder	Channels, tools
<b>Share Traffic Management Plan and Emergency Management Plan</b>	2 weeks prior to construction starting	SV Council Emergency Services	Via email
<b>Advise key stakeholders of project traffic plans and activities.</b>	2 weeks prior to construction starting  Regular reminders of traffic activity	SV Council Local MP's Emergency Services	During regular in-person meetings  Letters Phone calls

## Snowy 2.0 TCP Traffic and Transport Management Plan

Activity	Timing/ Frequency	Target Stakeholder	Channels, tools
<b>Formal notification emails</b>	Where major changes to traffic activity are planned	Chambers of Commerce Forestry Corporation Local industries	
<b>Create Traffic Update page on project website</b>	3 weeks prior to construction starting  Updated as required	All stakeholders	Website, single source of truth, link provided in all communication.
<b>Newsletter advising community of project traffic plans and activities.</b>	<b>2 weeks prior to construction starting</b>  <b>Regular reminders of traffic activity</b>  <b>Where major changes to traffic activity are planned</b>	<b>Local transport services</b>  <b>Chambers of Commerce</b>  <b>Locally Based Tourism Groups</b>  <b>Tourist Information Centres</b>  <b>General community and visitors</b>  <b>Community members who own property along high volume traffic routes</b>	<b>Newsletters (email and printed), distributed via letterbox drop, local membership groups, Libraries, Council Offices, Tourist Information Centres.</b>
<b>Media updates</b>	2 weeks prior to construction starting  Regular reminders of traffic activity  Where major changes to traffic activity are planned	Registered groups and local media	Local newspapers – articles and advertisements  Social media  Local noticeboards  All link to website
<b>Generate knowledge of the project online through website and social media.</b>	Ongoing program of information – monthly	All stakeholders	Social media posts, recorded on the website
<b>Monitor, evaluate, adapt, report.</b>	Ongoing	All stakeholders	Adapt channels, content and tools based on feedback

### Complaints Management

A Complaints Management Plan is available to all stakeholders via the Lumea website: <https://www.lumea.com.au/projects/snowy-2-0-transmission-connection-project#community-and-stakeholder-plans>. This plan outlines in detail the system in place for complaints to be raised and managed, and includes processes for:



## Snowy 2.0 TCP Traffic and Transport Management Plan

- Receiving, managing, and resolving the various forms of complaints and feedback from the community
- Addressing and resolving complaints and minimising the chance of recurrence
- Escalation and mediation.

This plan applies to all complaints directed to Lumea, Transgrid Group staff, the PC and subcontractors relating to the Project. The plan will be implemented and maintained for the duration of the Project and for a minimum of 12 months following completion of construction.

The process to raise a complaint is simple for stakeholders – a variety of channels are available to lodge a complaint directly with the project team. Contact details for the project team are published on the project website, the published Fact Sheet and will be included in all communication collateral. Complaints will be registered and logged within complaints register, with the responses being overseen by the Project Engagement Lead.

### Internal Communications

Weekly, toolbox talks, WHS inspections, environmental inspections, inductions, project progress meetings.

Daily prestart meetings, safety conversations and hazard observations

## 5.4. Monitoring and Reporting

Monitoring and reporting will be undertaken by the PC to measure the effectiveness of controls and implementation of this Plan.

The PC will respond in a timely manner to any requests in relation to monitoring or effectiveness of controls and their implementation raised by relevant roads authorities and affected Stakeholders.

The PC will monitor controls and the effectiveness of this Plan by;

- Inspection of access roads periodically
- Inspection and monitoring of current traffic controls
- Client Project inspections and audits
- Implementation of the audit schedule in the Project Checkit Planner
- Project and Contractor vehicle compliance.

The PC will report publicly via Transgrid on the effectiveness of this Plan by;

- Participating in monthly Council meetings, to communicate progress and any issues associated with the Project traffic management, for Council to relay to the Public through Council communication strategies
- Reporting any issues associated with Project traffic management immediately to The Client, including any changes to controls and procedures, for inclusion in The Client Community Liaison Plan
- Attending the Quarterly LEMC meeting to communicate to all LEMC Stakeholders any issues associated with traffic management, for their communication to their relevant departments.

## 6. Construction Area Speed Zones

Maximum speed limit on access track to Maragle Substation from Elliott Way site will be 40km/h, variable during deliveries and significant events on Elliott Way, enforced through Traffic Control.

Maximum speed limit on access tracks will be 30km/h.

Access to structures 12 and 13 off Elliott Way will incorporate measures (final design under consultation with NPWS) to ensure safe access off Elliott Way for vehicles and personnel, such as:

- A vehicle stopping bay and access gate a suitable distance away from the main road.
- The addition of guard rails and/or safety barriers where required
- Signage to warn drivers of slowing/slow vehicles accessing and leaving site

Maximum speed limits on all FGJV access roads will be in accordance with FGJV posted speed limit signage.

Designated call up points will be located for high risk identified areas i.e. Elliott Way from the Maragle Substation site east to Tower Site 12, with UHF channel and call up point displayed. This detail will be included on all relevant traffic control plans implemented for the current works. Communication must be called via UHF radio advising direction of travel and location through speed reduction areas as signposted. Limits shall apply within the construction work areas of 10km/h.

All other public and gazetted roads will be managed as per sign posted speed limits. At all times personnel are reminded to drive to the current road conditions.

All vehicles leaving site shall be inspected as clean, not tracking dirt and dust with covered loads and leave in a forward direction. Wheel wash to be installed at the main Maragle Substation site, Lobs Hole Ravine Rd has a wheel wash already installed and operated by FGJV. The access from Elliott Way will be maintained with a stabilised road base material after the Maragle Substation wheel wash. A mobile wash down trailer will be provided for access track works. All plant and vehicles will be inspected and declared clean, weed and seed free, as enforced by Transgrid and the PC, in accordance with BMP Appendix H Weed and Pathogen Control and Monitoring Program.

## Snowy 2.0 TCP Traffic and Transport Management Plan

### 7. Traffic Mitigation and Management Measures

The below table depicts pertinent sections of the COA's and details resources needed, implementation and responsibilities.

Table 7-1 Traffic Management Measures

ID	Measure/Requirement	Resources Needed	When to Implement	Responsibility	Reference
TTMP1	Training will be provided to all Project personnel, including relevant sub-contractors on the requirements from this plan through inductions, toolboxes and targeted training	Induction materials	Pre-construction Construction	Construction Manager WHS Advisor	B32
TTMP2	Transport routes to be identified and communicated to relevant authorities	Maps and consultation	Pre-construction Construction	Construction Manager WHS Advisor	B32
TTMP3	Prepare and submit a Traffic Management Plan relevant to Eastern and Western Sites of the Project	TTMP this plan	Pre-construction Construction	WHS Advisor	B32 TTMP this plan
TTMP4	Ensuring that Project traffic (HV and LV) does not impact local road users	Driver training and awareness, Interface and consultation meetings, minimise convoy lengths.	During construction	Construction Manager	B32 Best practice
TTMP5	Local roads and tracks are not adversely impacted by Project traffic	Contracted survey company to conduct dilapidation survey, no lengthy convoys anticipated during works. Scheduling Project traffic.	Pre-construction Construction	Construction Manager	B32 Best practice
TTMP6	Project traffic is controlled and managed safely with regard to speed, convoy length, number of movements, load size. Traffic flow is managed in and around construction/worksites and accommodation areas to	Monitoring, scheduling, temporary traffic control devices/signage, contracted traffic control company at site	Pre-construction Construction	Construction Manager WHS Advisor	Section 10.2 B32

## Snowy 2.0 TCP Traffic and Transport Management Plan

ID	Measure/Requirement	Resources Needed	When to Implement	Responsibility	Reference
	reduce congestion and queuing. Key intersections are not affected by Project traffic.	access points during potential disruptions and peak traffic times.			Best practice
TTMP7	Users of Talbingo Reservoir are not impacted by Project activities	Signage at boat ramps, consultation and interface meetings as per the Consultation and Communication Strategy Sect 5.3	Pre-construction Construction	Construction Manager WHS Advisor	B32 Marine TTMP 7.1 (Appendix F) Best practice
TTMP8	No spoil or dust/debris leaves site and is tracked onto local roads	Monitoring of loads leaving site, vehicle clean down inspection, dust suppression, covered loads	During construction	Construction Manager Environmental Advisor	B32 Spoil Management Plan, CEMP, Best practice Section 8.2
TTMP9	Safe work and traffic movements during periods of inclement weather, snow and ice	Monitoring weather conditions via BOM, daily prestart meetings	During construction	Construction Manager WHS Advisor	B32 Snow and Ice TTMP (Appendix D)
TTMP10	Traffic related incidents are avoided ideally but responded to if they occur	Driver training, driver awareness, induction materials, vehicle recovery procedure	Pre-construction Construction	Construction Manager WHS Advisor	B32 Project WHSMP-management of injuries ERP-incident response

## Snowy 2.0 TCP Traffic and Transport Management Plan

ID	Measure/Requirement	Resources Needed	When to Implement	Responsibility	Reference
					Heavy Vehicle Salvage Plan-wreckage management (Appendix E)
TTMP11	During stringing and other construction related activities traffic is not impacted on roads or waterways	Scheduling, temporary traffic control, signage, interface and consultation meetings	During construction	Construction Manager WHS Advisor	B32 TTMP Section 10.3 Marine TTMP 7.1 (Appendix F)
TTMP12	Notification to all Stakeholders of construction activities that may affect local roads, waterways and off-site locations	Effective incident management procedure interface and consultation meetings	Pre-construction Construction	Construction Manager WHS Advisor	B32 TTMP Section 5 WHSMP
<b>Approvals and Mitigation Measures (T1-T7 of Proponent Amendment Report)</b>					
T1	A CTMP will be prepared and implemented and will include: <ul style="list-style-type: none"> <li>• Confirmation of haulage routes including the water truck moments for the project area west</li> <li>• Measures to maintain access to local roads, and maintain the capacity of existing roads where possible •</li> </ul>	TTMP	Pre-construction Construction	Construction Manager WHS Advisor	TTMP this plan

Snowy 2.0 TCP  
Traffic and Transport Management Plan

ID	Measure/Requirement	Resources Needed	When to Implement	Responsibility	Reference
	<p>Site specific traffic control measures (including signage) to manage and regulate traffic movement •</p> <p>Requirements and methods to consult and inform the local community of impacts on the local road network due to the development-related activities</p> <ul style="list-style-type: none"> <li>• Consultation with TfNSW, and Snowy Valleys Council, NPWS, FCNSW and Snowy Hydro's contractors</li> <li>• The investigation of alternative routes to avoid transport through Batlow through the use of roads owned by FCNSW</li> <li>• Consultation with the emergency services to ensure that procedures are in place to maintain safe, priority access for emergency vehicles and emergency management activities</li> <li>• Access to construction sites including entry and exit locations and measures to prevent construction vehicles queuing on Elliott Way</li> <li>• A response plan for any construction related traffic incident • Monitoring, review and amendment mechanisms</li> <li>• Individual traffic management requirements at each phase of construction</li> <li>• Measures to minimise the number of workers using private vehicles travelling to and from project area west</li> <li>• Employment of standard traffic management measures to minimise short-term traffic impacts</li> </ul>				



## Snowy 2.0 TCP Traffic and Transport Management Plan

ID	Measure/Requirement	Resources Needed	When to Implement	Responsibility	Reference
	<p>expected during construction</p> <ul style="list-style-type: none"> <li>• Management of oversized vehicles</li> <li>• Relevant traffic safety measures, including appropriate signage, driver conduct and safety protocols</li> <li>• Identify requirements for, and placement of, traffic barriers</li> <li>• A fatigue and weather condition management plan for both light and heavy vehicles that details driver protocols for both driver fatigue and adverse weather</li> <li>• Bridge load assessments will be carried out in conjunction with the OSOM permit application process. The CTMP will also consider the following strategies to maintain access for regular and emergency management activities: <ul style="list-style-type: none"> <li>• Staging of construction works to avoid the need for roads to be fully closed for any extended period of time</li> <li>• Development of alternative access routes in consultation with NPWS and emergency services if any closures are required</li> <li>• Provision of sufficient shoulder width or regular stopping bays to allow regular and emergency vehicles to pass or stop.</li> </ul> </li> </ul>				
T2	Should the construction planning require that heavy vehicles to use the route via Elliot Way, Link Road and Goat Ridge Road between the project area east and project area west, the details will be included in the CTMP and a road safety audit and risk	TTMP	Pre-construction Construction	Construction Manager WHS Advisor	Section 8.5 and 9.1

## Snowy 2.0 TCP Traffic and Transport Management Plan

ID	Measure/Requirement	Resources Needed	When to Implement	Responsibility	Reference
	assessment will be carried out.				
T3	If works will affect the free flow of traffic a Traffic Control Plan will be prepared, and a Road Occupancy Licence will be obtained from TfNSW	TTMP	Pre-construction Construction	Construction Manager WHS Advisor	Section 2 P6, Section 6, Section 8.5. No ROL required.
T4	Road maintenance will be managed through the following measures: <ul style="list-style-type: none"> <li>• A Road Dilapidation Report will be prepared prior to and following construction of the project A road dilapidation survey of Elliott Way and other potential local roads utilised by the project will be carried out prior to commencing construction as agreed to with Snowy Valleys Council and NPWS. Any impacts identified as caused by the project will be rectified as specified with any road maintenance agreements</li> <li>• Routine defect identification and rectification of the access roads and tracks will be managed as part of the project maintenance procedure</li> <li>• Access roads and tracks will be designed in accordance with the relevant vehicle loading requirements.</li> </ul>	TTMP	Pre-construction Construction	Construction Manager WHS Advisor	Section 9.3
T5	Affected communities, visitors, FCNSW, NPWS and emergency services will be notified in advance of any disruptions to traffic and restriction of access impacted by project activities.	TTMP	Pre-construction Construction	Construction Manager WHS Advisor	Section 5
T6	Access protocols within KNP will be undertaken in accordance with the MOU between Transgrid and NPWS for the Procedure for the Undertaking of Inspection, Maintenance and Emergency Works of	TTMP	Pre-construction Construction	Construction Manager WHS Advisor	Section 1.1

Snowy 2.0 TCP  
Traffic and Transport Management Plan

ID	Measure/Requirement	Resources Needed	When to Implement	Responsibility	Reference
	Transgrid Network Assets and Associated Infrastructure.				
T7	<p>For the access track to structures 12 and 13 (first two structures on the western side of Talbingo Reservoir), measures will be incorporated into the final design under consultation with NPWS to enable vehicles to safely stop for personnel to open and close the access track gate. Such measures may include:</p> <ul style="list-style-type: none"> <li>• The placement of the gate at a suitable distance along the track as to avoid vehicles parking on/adjacent to Elliott Way</li> <li>• Incorporation of a pull over bay alongside the existing Elliott Way Road surface.</li> <li>• Appropriate safety measures including the use of guard rails will be incorporated into the design where required.</li> </ul>	TTMP	Pre-construction Construction	Construction Manager WHS Advisor	Section 6

## 8. Main Site Office and Laydown Areas

Throughout the construction of the project, workshop and laydown areas, all areas will be controlled using an internal Traffic Movement Diagram, which will include details of specific signs and their locations.

### 8.1. Construction and Laydown Areas

Dependent upon road and access conditions at the time, traffic access to and from lay down areas and construction areas shall be via nominated roads detailed on the Traffic Control Diagrams. Where practicable, a one-way traffic system shall be established around the workshop area to minimise interaction issues and a truck waiting area will be established away from the laydown area to reduce congestion in the laydown area.

### 8.2. Spoil Management

All employees will be inducted and at such time informed of their responsibility to ensure vehicles are cleaned down so as to minimise mud being tracked off site and ensure loads are covered to ensure spoil is not tracked offsite or dropped on to roads. Supervisors will be responsible for monitoring condition of roads under their control and cleaning, sweeping, modifying behaviours as necessary to keep roads free of mud and rock material. Roads will be included in Environmental Site Inspections and any actions raised, tracked and closed out within prescribed time frames.

Spoil haulage into and from sites are to comply with the following spoil movement requirements.

- Abiding with designated Heavy Vehicle Routes and site-specific Traffic Management Diagrams
- Checking tailgate latches are locked before leaving site
- Covering all loads
- Checking vehicles before exiting for mud and rocks on tyres and tailgates, clean down as required
- Using stabilized entry / exits
- Reporting any dirt or rocks tracked onto public roads to the PC management asap, cleanup as required
- Using Spoil Movement & Placement Permits when transporting spoil (3200-0645-PLN-020-CEMP-SMP Spoil Management Plan)
- Drivers to coordinate with other plant operators for spoil unloading. Spoil must not be placed in or near drainage lines.
- Ensure no placing of spoil close or on erosion & sediment controls like mulch bunds, which are not protected with sediment fencing or within 50m of a waterway
- Drivers to be trained in spoil transporting requirements. All spoil movement is to be managed via the Spoil Management Plan (SMP) as part of the Soil & Water Management Plan (SWMP)
- Ensuring trucks coming in from potentially weed-infested areas abide by biosecurity control measures specified in the Biodiversity Management Plan (BMP) and are cleaned of weed seed material prior to entry into the Park.
- Ensuring trucks are not overloaded when moving spoil material generated on the project.
- Ensuring truck drivers sweep loose material off trailer bars before departing site.

## Snowy 2.0 TCP Traffic and Transport Management Plan

- Installing wash bays as required where potential for dragout onto roads may occur.

### 8.3. Project Vehicle Parking

Designated parking areas shall be established within the Maragle Substation only and directions signposted outside the main site entrance. All vehicles must be reverse parked in designated carparking areas and all vehicles must be switched off when unattended and braking mechanisms engaged. Vehicles are not permitted to park on public roads, within public carparks, in off-easement areas, vegetated areas, and beneath trees.

### 8.4. Project Activities – Mobile Plant and Equipment

Outcomes from a traffic management risk assessment shall be integrated within the project risk register and appropriate safe work method statements along with other applicable documentation. All heavy equipment operators shall be ticketed for the particular machine they will be required to operate on site. Site vehicles will be minimised on site with the use of crew buses to transport crews to and from the work fronts. Shuttle bus pick up/drop off will be at workers accommodation (Tumbarumba Caravan Park) to and from the work fronts.

### 8.5. Inspection and Review Process

As a minimum the PC shall perform the following:

- Monthly Inspections and routine audits of all the transport routes shall be conducted to ensure compliance to site requirements on Traffic Management
- Any scope of work or planned works introducing traffic changes shall initiate a review of traffic control plans
- Ongoing monitoring of traffic to be completed on Traffic Management Inspection Checklist
- Maintain contact with NPWS community team to be aware of special event, weather-related traffic matters that could be impacted by project-related traffic movements.

The above shall be completed as per the projects CheckIt HSE Activity Planner.

### 8.6. Towing of Equipment

A daily pre-start inspection shall be completed on any mobile plant prior to use. Trailers must be fitted with a secondary securing device (chain), which must always be used when being towed. A jockey wheel must also be attached and operational, all brake lights and indicators are to be checked as functional.

## 9. Transportation

### 9.1. Haulage Routes

All heavy vehicles requiring escort associated with the Project must only travel to and from site via the Primary Access Routes as identified in Figure 4, Appendix A.

Due to the elapsed time between the EIS and commencement of construction and to meet WHSMP requirements, haulage routes via public roads are to be subject to a road safety audit and risk assessment, then confirmed as suitable haulage routes pending these reports. This is to be performed and confirmed prior to any construction activities commencing. The PC will confirm these agreed actions in consultation with NPWS. All agreed actions will be collated into a register which will include the actual details summarised from the discussions. Such discussions have not been required to date, however will be incorporated on an as needed basis upon network constraints. Any modifications to the Primary Access Routes must be agreed to by the Planning Secretary in accordance with COA B25 in consultation with the relevant road controlling authority (TfNSW for State roads) and include, any road upgrades required by the road safety audit be completed prior to the commencement of construction activities using the revised haulage routes.

Haulage routes to avoid transporting regular and oversize loads through Tumut to be investigated and confirmed with consultation with FCNSW. All oversize/overmass (OSOM) vehicles will be escorted as required by permit from the relevant road authority. The only OSOM load required for Stage 1 of the Project for the PC will be the Auxiliary Switchroom Building, to be delivered to the Switchyard site on the Project Area West, via Elliott Way. All other OSOM vehicle movements will be coordinated by Transgrid. An assessment of the route and potentially impacted infrastructure has been undertaken (refer to Appendix L) and includes the following recommendations based on a maximum axle load of 13.5 tonnes.

- The central abutment bearing at Paddys River is repositioned under the girder.
- Load to be transported along the centre of the bridges (within 1 metre of the centre).
- No other vehicles on the structures at the same time as the load.
- Speed of the load over the bridges not to exceed 15 km/hr.
- No sudden acceleration or braking while the load is on the structures.
- The bridges to be assessed again a maximum of 6 months prior to the movement of the loads.

All relevant OSOM loads will be transported in accordance with Transgrid's National Heavy Vehicle Regulator (NHVR) Permit and in consultation with relevant road authorities and affected stakeholders, where required. High Risk OSOM deliveries (such as transformers and reactors) will be addressed in an updated version of this plan when appropriate information is available and prior to High Risk OSOM movements occurring.

Development-related vehicle speeds on Lobs Hole Ravine Road, Mine Trail Road and within the FGJV site are to be restricted to 30 km/h.

### 9.2. Transport Strategy

A Transport Strategy based on the approved 'staging' of the project has been prepared addressing B27 a) to e) inclusive and is currently out for consultation and will be included in subsequent updates of the TTMP as an Annexure.

A Transport Strategy was developed in consultation with NPWS, FCNSW and SVC. Proponent



## Snowy 2.0 TCP Traffic and Transport Management Plan

commits to preparing Long-Term Road Strategy within 2 years of the commencement of construction.

During Stage 1 of the Project the only public road upgrade will be the upgrade to the intersection of East Bago Powerline Road and Elliott Way to support the swept path of OSOM vehicles entering off Elliott Way. Widening of the existing access track will also be required. This upgrade is required to allow for the delivery of oversize plant to the substation site (refer to Appendix G). This will be permanent but will have no effect to Elliott Way or any other roads owned by Local Council or other Regulatory Bodies. Works will be managed in accordance with 10.2 Traffic Management. Works associated with access roads and intersections are detailed in the Transport Strategy, and are as follows:

- Gates will be installed at intersections with Elliott Way to restrict unauthorised access. Gates will be set back off Elliott Way to ensure that maintenance vehicles can safely park off Elliott Way when opening the gates.
- The intersections with existing formed roads (i.e. Elliott Way) will not require a change to the function or operation of the of the intersection in terms of speed or lines of sight (etc.)
- The modification to the surface and drainage design will be keeping with the intersections existing design and will comply with the Austroads guidelines where required and to the satisfaction of NPWS.

Assessment of the OSOM routes and structural suitability of infrastructure for the Project have been undertaken by Transgrid for Stage 2, namely CoA B31. The assessment is detailed in Appendix L and the recommendations outlined in Section 9.1 above.

The Proponent must ensure that any temporary and the permanent bridge over Sheep Station Creek is designed and constructed to comply with the relevant requirements of the:

- a) Relevant Austroads Standards (such as elevating them above the 1% AEP flood level);
- b) Guidelines for Controlled Activities on Waterfront Land (NRAR, 2018); and
- c) Policy and Guidelines for Fish Habitat Conservation (DPI, 2013) and Why do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (NSW Fisheries, 2003).

### 9.3. Road Maintenance (Local Roads)

Road maintenance will be managed through the following measures:

A Road Dilapidation Report will be prepared (in accordance with Condition B29) by an Independent Contracted Survey Company prior to and following construction of the project for all local roads on the transport route as shown in in Appendix 4 of the CoA, prior to construction, upgrading or decommissioning works; and condition of all local roads on the transport route (including local road crossing). Due to the approved staging of the project, the dilapidation report for Stage 1 will be prepared ahead of Stage 2.

Road dilapidation surveys of all local roads on the transport route will be carried out 1 month prior to commencing construction as agreed to with Snowy Valleys Council and NPWS, also annually in detail and monthly during construction works. Any impacts identified during dilapidation surveys as caused by the project will be repaired within 7 days from identification as agreed and to the satisfaction of the relevant road authority/manager.

A final road dilapidation survey will be carried out within 1 month of the completion of construction, upgrading or decommissioning works, or within a timeframe agreed to by the relevant road's authority. Any identified impacts from construction, upgrading or decommissioning works will be rectified within 2 months of the completion of the survey to the

## Snowy 2.0 TCP Traffic and Transport Management Plan

satisfaction of the relevant roads authority/manager

Any impacts identified as caused by the project that could endanger road safety will be rectified as soon as possible after it is identified but within 7 days at the latest, including emergency repairs. Routine defect identification and rectification of the access roads and tracks will be managed as part of the project maintenance procedure. Access roads and tracks will be designed in accordance with the relevant vehicle loading requirements.

### 9.4. Local Road Access

Local road access and capacity for residents and regular road users is to be monitored and considered by the Construction Manager in charge of the site when planning all vehicle movements. The Construction Manager will also confer with relevant road owner / Communications Manager to inform himself of any complaints/feedback/planned events and use this feedback loop to monitor and improve effectiveness of this approach to sharing this shared public asset. The provision of extra passing bays and stopping bays to be considered if required to maintain regular traffic flow and emergency vehicle access.

All heavy vehicle movements will be tracked and recorded using a Heavy Vehicle Movement Register and published in NGER's. The National Greenhouse and Energy Reporting Act 2007 (NGER Act) introduced a single national framework for reporting and disseminating company information about greenhouse gas emissions, energy production and energy consumption. All vehicle movements are to adhere to the PC Chain of Responsibility and Driver Code of Conduct.

There are no planned requirements for regular vehicle access to Talbingo Reservoir or other water related infrastructure. The intersection of Snowy Mountains Highway and Link Road is not to be used for overdesign or heavy vehicle access for Stage 2 works.

Table 9-1 Schedule of Road Upgrades

Bridge Crossing / Location	Timing	Relevant Road Authority	Responsibility
<b>Stage 1 Works - Substation compound access points</b>			
Elliott Way	Access point upgrade	Snowy Valleys Council	PC
Sheep Station Creek	Bridge Crossing	Transgrid	PC
Access tracks 1-8, 10 & 12	Access track construction	NPWS	PC
Access track 9	Access track construction	Snowy Valleys Council & FCNSW	PC
<b>Stage 2 Works - 500kV Transgrid Substation Works</b>			
Little Billabong Creek, Little Billabong Road	Compliance with recommendations in Appendix L	TfNSW	Transgrid
Vokins Creek, Little Billabong Road	Compliance with recommendations in	TfNSW	Transgrid

Snowy 2.0 TCP  
Traffic and Transport Management Plan

Bridge Crossing / Location	Timing	Relevant Road Authority	Responsibility
	Appendix L		
Lapstone Creek, Tumbarumba Road	Compliance with recommendations in Appendix L	TfNSW	Transgrid
Carabost Creek, Tumbarumba Road	Compliance with recommendations in Appendix L	TfNSW	Transgrid
Doughtys Creek, Tumbarumba Road	Compliance with recommendations in Appendix L	TfNSW	Transgrid
Bells Creek, Wagga Road	Compliance with recommendations in Appendix L	TfNSW	Transgrid
Vokins Creek, Wagga Road	Compliance with recommendations in Appendix L	TfNSW	Transgrid
Mannus Creek, Wagga Road	Compliance with recommendations in Appendix L	TfNSW	Transgrid
Tumbarumba Creek, Albury Street	Compliance with recommendations in Appendix L	TfNSW	Transgrid
Burra Creek, Tooma Road	Compliance with recommendations in Appendix L	Snowy Valleys Council	Transgrid
Paddys River, Tooma Road	Compliance with recommendations in Appendix L	Snowy Valleys Council	Transgrid

## Snowy 2.0 TCP Traffic and Transport Management Plan

### 10. Safety

#### 10.1. Pedestrian Management

All members of the public will be excluded from site. Drivers and operators shall remain alert to the movement of pedestrians anywhere, particularly where personnel may be required to cross roads where there is no designated pedestrian walkway and within shared public and work areas. The PC will induct all workers to site, outlining such things as pedestrian activity, hazards and controls, such as signage, designated pathways, site speed limits for vehicles, hazards. Drivers will adhere to the Project Induction driving requirements, the Pre-Arrival Safety Flyer, the PC Chain of Responsibility Appendix I and Driver Code of Conduct Appendix J & K.

Pedestrian workers (the PC and Sub Contractors) shall ensure that they:

- Adequately check for approaching vehicles prior to crossing roads
- Have visual / verbal contact and acknowledgment with the vehicle operator before proceeding
- Do not enter the 'Blind Spot' of operating mobile plant.

#### 10.2. Traffic Management

- Access to construction sites to be designed and monitored to minimise conflict of development-related traffic on access roads (Elliott Way, Link Rd). Where site activities require such movements with potential for impact on public, traffic movements will be planned in advance through communications to the relevant road owner during regular meetings to advise of any extraordinary site access needs so as to ensure this is done safely and with the least disruption to through traffic, additional traffic control will be implemented as assessed. Elliott Way inside KNP will be restricted to no more than 8 heavy vehicles per day for water cartage purposes, there is no anticipated water cartage from Snowy 2.0 Tailbay site.
- TCP's to be monitored, reviewed and amended/improved as required during different phases of construction to ensure suitability. TCP's for specific events to be designed and implemented by a contracted traffic control company.
- Traffic flow, speed limits and control measures around worksites, construction compounds and accommodation areas will be monitored, reviewed, and amended as required by weekly and monthly HSE inspections as scheduled and corrective actions implemented in a timely manner using the Synergy reporting system.
- Traffic management on access roads to be implemented, warning signs of approach to site, heavy vehicles turning, stop slow Traffic Controllers, temporary traffic controls, detours and signage, etc as required by short term impacts to local traffic on access roads.
- Heavy and oversized vehicles to adhere to the chain of responsibility, (road permits and escort vehicles if required by HVNL). Access to site to be coordinated and timed as to not impact on local traffic and access roads.
- Measures to minimise convoy lengths include:
  - Restricting heavy vehicles for water cartage to no more than 8 per day on Elliott Way and inside KNP as required under CoA B30(b)
  - Minimising convoy lengths by staging and scheduled as to not impact local traffic.
  - Staging and scheduling to be varied around regular discussions with NPWS to maintain awareness of park events, weather conditions and any other network

## Snowy 2.0 TCP Traffic and Transport Management Plan

constraints.

- The Project Construction Manager and the Project HSE Team will monitor heavy vehicle movements, convoy lengths and timings by conducting weekly and monthly HSE inspections, reporting and issuing corrective actions using the Synergy reporting system.
- All vehicle movements are to adhere to the PC Chain of Responsibility.
- Minimise potential cumulative traffic impacts with other projects in the area by staging and scheduling any expected large volumes of traffic. Weekly and monthly HSE inspections will monitor cumulative traffic and potential development related traffic issues, and corrective actions implemented in a timely manner using the Synergy reporting system.
- Scheduling of all traffic movements will be discussed, agreed upon and communicated in look ahead schedules during weekly meetings to ensure minimisation of any impacts to local traffic, including school bus routes, and prevention of queuing on public roads. Monitoring this measure will be conducted by weekly and monthly HSE inspections.
- Posted site speed limits to be adhered to within site and construction areas/access roads. Traffic control signage and additional directional signage will be placed at key intersections (if not already in place and suitable by FGJV) to control development related traffic speeds.
- All traffic on FGJV site will adhere to the FGJV TTMP, restrict development-related vehicle speeds on Lobs Hole Ravine Road, Mine Trail Road and within the site to 30 km/h between sunset and sunrise, unless the Planning Secretary agrees otherwise.
- Speed limits of any vessels used on Talbingo Reservoir to be in accordance with current TfNSW speed limits or local posted speed limits (whichever is the lower speed limit).
- Traffic on Talbingo Reservoir to be managed during stringing operations in accordance with Appendix F Marine Traffic Management Plan.
- Traffic on Elliott Way to be managed during stringing operations by adherence to the stringing methodology (TBA) and with spotters, traffic control and regular inspections as applicable. A short indicative description of the intended stringing method is outlined below (to be augmented by the PC Stringing Methodology TBA)
  - Setup Brake and winch sites in section to be strung,
  - Unclip wire/wires that are going to be replaced, (depending on how long the wires will, be unclipped before stringing, safety rigs will be installed over any infrastructure that could be affected if the wires were to come down, i.e., roads/services.
  - Day of stringing – traffic control is to be set up a per TMP before any stringing works. Traffic control will not be in place to shut the road down but slow the traffic down in this section of road in case the wire comes down and so the TC can stop traffic safely.
  - Wire strung and terminated at correct tension and clipped in (any road/services should be clipped in first).
  - Move on to next section

**Unclip** – released from permanent fixed point and put into sheave (large rolling block)

**Clip in** – reverse process.

- All vehicle movements are to adhere to the PC Chain of Responsibility.
- All heavy vehicles requiring escort associated with the development must only travel to and from the site via

## Snowy 2.0 TCP Traffic and Transport Management Plan

the Primary Access Routes described in the EIS, as identified in the figure in Appendix 4 of the CoA (Appendix A Fig 4 this plan), unless the Planning Secretary agrees otherwise.

Note: 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.

### 10.3. Safe Driving Requirements

All personnel inducted onsite shall adhere to the following at all times:

- Mobile phones shall not be operated in moving vehicles, plant or equipment. Where mobile phones are to be used, the vehicle must be stationary and parked in a safe place
- The PC Project Induction requirements for safe driving, driving to site, delivery drivers, short term workers and visitors.
- Compliance with Future Gen/Snowy 2 vehicle and driver requirements (refer the PC Interface Plan 3200-0645-PLN-030-IMP). All vehicles and mobile equipment will be fitted with seat belts. All personnel will wear, and correctly fit and secure seatbelts provided at all times
- Adherence to the PC Fatigue Management Procedure (Appendix C) and monitoring of current and forecast weather conditions, adhering to controls for accessing and driving at site as stipulated in the 3200-0645 Project Risk Register.
- All drivers shall be fit to drive 0.00 Blood Alcohol Concentration
- All personnel traveling in excess of 4 hrs to or from site shall complete a Journey management Plan.
- The drivers rules and expected hazards will be communicated in the site-specific induction.
- Re-fuelling: The minimum requirements for re-fuelling are:
  - The engine is to be shut down and ignition off, left in gear, park brake engaged
  - Preventative measures required for uncontrolled movement; NO person is permitted in the cab while another person is refuelling
  - No equipment is to be left unattended while refuelling and maintain separation from other traffic
  - Correct PPE is to be worn when refuelling. Hydrocarbon spill response kit available at re-fuelling area
  - Drip tray to be in place during refuelling.

In addition, all unauthorised vehicles will not enter site until a supervisory person (spotter) guides them to designated areas. All drivers of visiting/delivery vehicles are to report to the site office for further direction or an escort.

All off road driving activities will only be performed by personnel formally trained in 4WD driving (RIIVEH305D – Operate and Maintain a Four-Wheel Drive); and in a designated 4WD vehicle. Any vehicle driving within a “Construction Site” area of the Project will be fitted with a two-way radio and amber flashing light, or to be escorted as above.

Any vehicle driving/transiting the FGJV Site will be required to adhere to the FGJV vehicle and training requirements, including visitors and deliveries, refer to the PC Interface Plan 3200-0645-PLN-030-IMP.

All personnel inducted on site will be made aware of known and potential NPWS and FCNSW activities including the potential for NPWS and FCNSW plant and equipment being in operation including heavy plant and log trucks.



Snowy 2.0 TCP  
Traffic and Transport Management Plan

#### 10.4. Incident Management

Where safe to do so, any vehicle involved in an incident on site shall not be moved until such time as the incident has been investigated and the PC Project Manager or their delegate has issued permission for the vehicle to be moved. Incidents that occur at the project site shall be reported in accordance with the requirements set out in the Work Health Safety Management Plan. A driver of any vehicle involved in an accident shall be required to undertake a Drug and Alcohol test as requested.

All persons and organisations undertaking these works have a duty of care to take all reasonable measures to prevent accident or injury in and outside the project area.

Any incident on Elliott Way resulting in a vehicle accident, damage to infrastructure, injury/fatality, breakdown on the carriageway, or any incident requiring road closures/delays is to be reported to the Tumbarumba Police (if not an emergency), 000/112 if an emergency is deemed an appropriate level of incident classification. Further detail on traffic incident management process can be obtained from the Emergency Plan which has been developed in consultation with all relevant road owners/agencies.

All incidents/accidents occurring within the FGJV site are to be reported to FGJV as well as the PC.

All incidents will be investigated using the PC Incident Management-Reporting and Investigation Procedure, to enable lessons learned and corrective actions to prevent reoccurrence. All incident and non-compliance notifications will be done in accordance with CoA's C7 – C9.

All incidents will be reported to Transgrid for communication to the relevant authority.



## 11. Environmental

There are specific environmental concerns associated with construction traffic and these items are addressed in the project Construction Environmental Management Plan (CEMP).

All construction movements shall be conducted within standard construction hours and approved out of hours work (OOHW), the exception of exempt emergency works, and not travel off delineated access tracks or outside surveyed work areas. Hazardous substances will be managed in accordance with the CEMP.

## 12. Traffic Control Devices

Traffic control devices meeting the requirements of AS 1742 shall be installed as indicated on future Traffic Control Diagrams.

- Advance Warning signs (refer AS/NZS 1742.3-2019)
- Regulatory and other signs / devices: Workmen Ahead, Diagrammatic Traffic Controller, Diagrammatic Man Dig, Prepare to Stop, Speed Advisory, etc
- Provision of accredited (Stop/Go) traffic controllers.

At the completion of traffic management work, the removal of the traffic control devices shall be completed in a controlled manner to minimise the risk to workers and other motorists.

A NSW endorsed traffic management control company will be selected to conduct traffic management activities, develop plans and submit in a timely manner to ensure approval before works on behalf of the PC.

## 13. Fatigue Management

All works conducted on the Maragle Substation and 330kV Transmission Line Connections and associated works shall adhere to the UGL Fatigue Management Procedure UGLMS-131-380 (Appendix C) and the 3200-0645 Project Risk Register.

Snowy 2.0 TCP  
Traffic and Transport Management Plan

## APPENDIX A : Traffic Management Plan and Planning Tool

NOTE: THIS FORM IS TO BE COMPLETED WHEN TRAFFIC MANAGEMENT WORKS ARE BEING MANAGED AND COMPLETED BY the PC EMPLOYEES.

ONLY the PC EMPLOYEES WHO HAVE SUCCESSFULLY UNDERTAKEN THE REQUIRED TRAINING AND HOLD THE APPROPRIATE COMPETENCIES FOR THE STATE THEY ARE WORKING IN MAY DEVELOP AND IMPLEMENT TRAFFIC MANAGEMENT PLANS.

WHERE THERE ARE NO the PC EMPLOYEES WITH THE RELEVANT TRAINING, EXTERNAL CONTRACTORS MUST BE ENGAGED.

The Traffic Management Plan (TMP) is a tool that the PC employees should use to ensure that site hazards have been appropriately identified and controlled prior to traffic control works commencing.

The Project Manager / Site Supervisor is to develop the TMP by considering the traffic management issues that are unique to their environment in consultation with the Health and Safety Representative and employees.

To complete this TMP planning tool, simply read the question in the 'hazard management' box on the left-hand side of the table and write your requirements into the 'details' box on the right-hand side of the table. The TMP can then be developed from these requirements.

<b>Project:</b>	_____	<b>Project Manager:</b>	_____
<b>Date of Plan:</b>	_____	<b>Construction Manager:</b>	_____
<b>Date of Plan Review:</b>	_____	<b>Health &amp; Safety Rep:</b>	_____
<b>Duration of Works:</b>	_____	<b>HSE Manager:</b>	_____
<b>SWMS attached?</b>	_____	<b>Person completing TMP:</b>	_____

EGRESS & ACCESS		
The following safety features are in place to ensure that egress and access for the site is established and maintained in a safe manner:		
NO.	HAZARD MANAGEMENT	DETAILS
1.0	Egress (exits) from the site is located at:	
2.0	Access (entry) to the site is located at:	
3.0	Egress and Access clearly marked by (i.e.	

Snowy 2.0 TCP  
Traffic and Transport Management Plan

EGRESS & ACCESS		
The following safety features are in place to ensure that egress and access for the site is established and maintained in a safe manner:		
NO.	HAZARD MANAGEMENT	DETAILS
	signage, marked bays etc.):	
4.0	Designated pedestrian crossings are located at:	
5.0	Designated pedestrian crossings are supervised at the following times:	
6.0	Traffic/crossing controllers will utilise the following safety aids and equipment (i.e. lollipop sign, crossing flags, high visibility jacket)	
7.0	Pedestrian walkways are physically protected from designated roadways by (i.e. bollards, fences):	
8.0	Pedestrian walkways and/or detours are clearly marked/indicated by (i.e. designated walkways, road markings):	
9.0	Speed restriction signage is clearly displayed in the workplace at the following locations (i.e. insert number and location of signs):	
10.0	Speed controlling devices are in place to restrict vehicle speed on site in the following locations (i.e. speed humps are located....):	
11.0	Shaker/Wheel wash bays are installed at the following location:	
12.0	Other conditions: Are there any 'Blind spots' on site? What are the nearby business occupier requirements? (i.e. schools, businesses) Do access and exit points need to be stabilised?	

Snowy 2.0 TCP  
Traffic and Transport Management Plan

### ROAD CONDITIONS

The following safety features are in place to ensure that the road conditions of the site are fit for use and maintained in a safe manner:

NO.	HAZARD MANAGEMENT	DETAILS
1.0	Poor road conditions around the site are located (i.e. insert location/s):	
2.0	Potential areas of congestion could be located (i.e. insert location/s):	
3.0	Road crossing / pedestrian crossings will be located (i.e. insert locations):	
4.0	Road closures will be needed for the following dates / times:	
5.0	Road maintenance will be managed by (i.e. insert company name, company contact and phone number):	
6.0	Alternative driving route for emergencies and/or over-sized vehicles (i.e. state what the alternative route is):	
7.0	Plan to manage the risk of end-of-queue collisions due to a build-up of traffic at the work site (plan needs to state how this will be monitored):	

### DELIVERY POINTS

The following safety features are in place to ensure that delivery points for the site are established and maintained in a safe manner:

NO.	HAZARD MANAGEMENT	DETAILS
1.0	Designated loading bay for the site is located at:	
2.0	Loading bay or delivery drop off points are clearly marked by (i.e. marked loading bay signage etc.):	
3.0	Worksite speed limits are set at (10 km/hr.) with clearly displayed signage located at (i.e. insert number and location of signs):	

Snowy 2.0 TCP  
Traffic and Transport Management Plan

DELIVERY POINTS		
The following safety features are in place to ensure that delivery points for the site are established and maintained in a safe manner:		
NO.	HAZARD MANAGEMENT	DETAILS
4.0	Location of speed controlling devices in place to restrict vehicle speed on site (i.e. 2 speed humps are located on the roadway adjacent the site shed):	
5.0	Other considerations: Should internal roadways be only one way? Should concave mirrors be used to assist with visibility? Should vehicles be prevented from accessing certain areas on site? What are the communicative arrangements? (i.e. two-way radios): How will the housekeeping of traffic management materials be maintained? Are deliveries scheduled to minimise truck waiting time?	

SAFE PASSAGE OF VEHICLES ( <i>i.e. large vehicles, mobile plant etc.</i> )		
The following safety arrangements and features are in place when large vehicles or mobile plant such as scissor lifts and forklifts are required to move around the worksite:		
NO.	HAZARD MANAGEMENT	DETAILS
1.0	Vehicles are not allowed to move around the site during the following time periods of peak pedestrian traffic (i.e. insert time periods):	
2.0	Prior to entering the site, drivers of the large vehicle must report to:	
3.0	Drivers must arrange for a member of staff to act as a "spotter" to supervise vehicle movements whilst on site. Name of spotter:	
4.0	Mobile plant (i.e. forklifts/telehandlers) are only to be used in the following areas (as clearly designated on the site map):	



Snowy 2.0 TCP  
Traffic and Transport Management Plan

### SAFE PASSAGE OF VEHICLES (i.e. large vehicles, mobile plant etc.)

The following safety arrangements and features are in place when large vehicles or mobile plant such as scissor lifts and forklifts are required to move around the worksite:

NO.	HAZARD MANAGEMENT	DETAILS
5.0	Worksite speed limits are set at (10 km/hr.) with clearly displayed signage located at (i.e. insert number and location of signs):	
6.0	Other considerations: Are roadways of enough width to allow for cars going in both directions to pass each other safely?	
7.0	Above ground services impacting on vehicle/plant traffic	

### PARKING ARRANGEMENTS

The following safety arrangements and features are in place to minimise the risks associated with vehicle parking:

NO.	HAZARD MANAGEMENT	DETAILS
1.0	Number of car parking available for site personnel and location:	
2.0	The number of car parks available for visitors:	
	The number of car parks available for people with disabilities:	
3.0	Car parking areas are clearly designated with marked parking bays and signage displayed in the following areas (i.e. insert number and location of parking signs):	
4.0	Signage identifying the whereabouts of the site office/reception is clearly visible from the car park, located at:	
5.0	Other considerations: Should there be pedestrian only pathways? Should concave mirrors be used to assist with visibility? Should the community be notified of public parking usage?	

Snowy 2.0 TCP  
Traffic and Transport Management Plan

### PARKING ARRANGEMENTS

The following safety arrangements and features are in place to minimise the risks associated with vehicle parking:

NO.	HAZARD MANAGEMENT	DETAILS
	Will access to private property be impacted? Has the change to parking been clearly communicated?	

### SPECIAL EVENTS (i.e. commissioning, large deliveries)

The following broad safety arrangements and features are in place to minimise the risks associated with special events in conjunction with previously documented control measures:

NO.	HAZARD MANAGEMENT	DETAILS
1.0	Appropriate numbers of traffic controllers will be in place for all special events to restrict/direct traffic to and from the workplace (i.e. number and located of traffic controllers):	
2.0	Additional car parking areas are clearly designated with marked parking bays and signage displayed in the following areas (i.e. insert number and location of parking signs):	
3.0	Loading bay and drop off areas will be widened to ensure large deliveries can be safely off-loaded from trucks in the following areas (i.e. insert locations):	
4.0	Additional bollards / fencing is in place in the following areas:	
5.0	Other considerations: Should there be pedestrian only pathways? Should concave mirrors be used to assist with visibility? Should deliveries be organised outside peak traffic and school zones? Should community (e.g. businesses, residents) be notified of expected traffic impacts?	
6.0	Transport	

Snowy 2.0 TCP  
Traffic and Transport Management Plan

**SPECIAL EVENTS (i.e. commissioning, large deliveries)**

The following broad safety arrangements and features are in place to minimise the risks associated with special events in conjunction with previously documented control measures:

NO.	HAZARD MANAGEMENT	DETAILS
-----	-------------------	---------

*Traffic control requirements for special events may vary. Specific control measures will need to be determined through a risk assessment process taking into consideration learning's from previous special events.*

**APPROVAL (i.e. local council, HSSE Coordinator)**

The following people / bodies must sight and approve this traffic management plan prior to the establishment of such a plan on site:

NO.	HAZARD MANAGEMENT	DETAILS
-----	-------------------	---------

1.0	Local council or approving body (insert name of council / approving body, contact person and contact phone number):	
-----	---	--

2.0	Road Authority approval (insert contact name and contact phone number):	
-----	---	--

3.0	HSE /HSE Manager (insert name and contact phone number):	
-----	--	--

4.0	Health and Safety Representative (insert name and contact phone number)	
-----	---	--

5.0	Traffic management personnel (insert name of traffic management personnel and contact phone numbers)	
-----	--	--

*All site personnel on site must be inducted into the Traffic Management Plan through a toolbox talk or pre-start meeting. All site personnel must be aware of the traffic conditions on site and must be re-informed (through a toolbox talk or pre-start meeting) when site conditions change.*

Snowy 2.0 TCP  
Traffic and Transport Management Plan

Figure 3 Maragle Substation Access TTMP

TRAFFIC GUIDANCE SCHEME – Access to Project site

[PLACEHOLDER] Substation, Elliott Way Tower Sites and Lobs Hole Access and Traffic Control  
TBA When Possession of Sites Takes Place, Site Set Up is Yet to be Finalised.

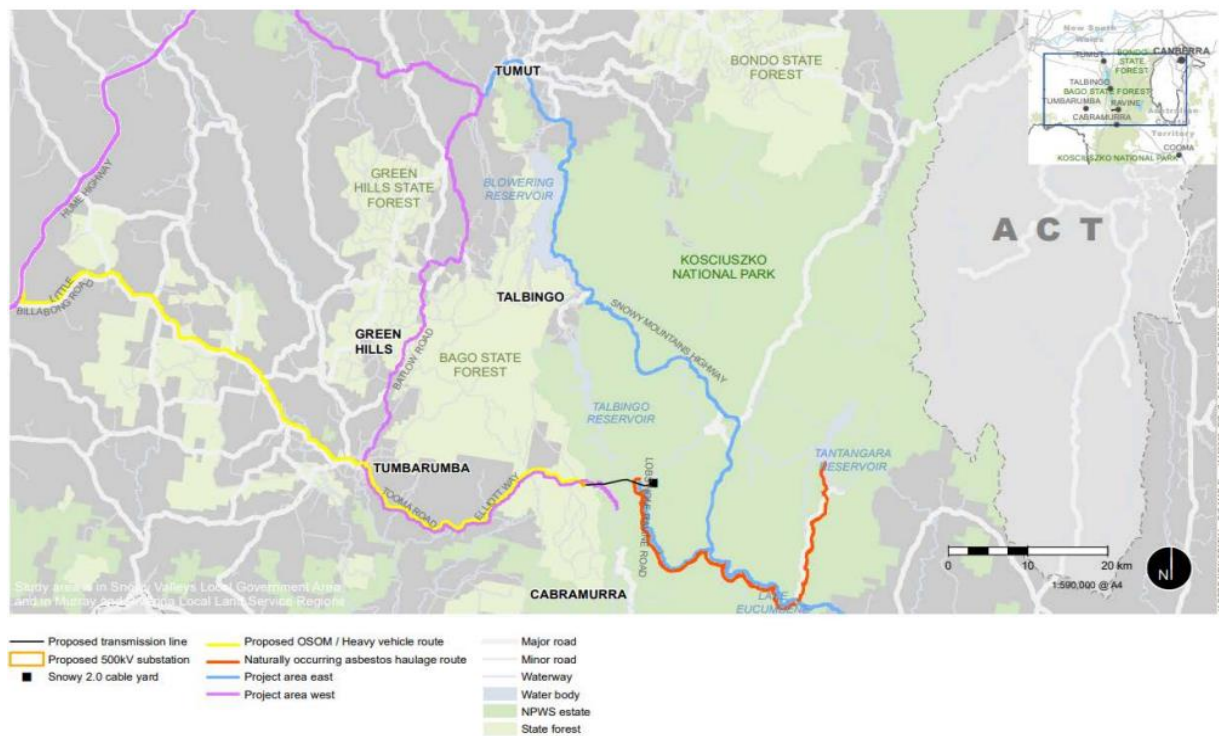
## Snowy 2.0 TCP Traffic and Transport Management Plan

Figure 4

Figure 4 Heavy Vehicle Route

### Heavy vehicle Route - Over-Dimensional and Heavy Vehicle Access Route Restrictions

Note - Substation and Western Transmission Line traffic will access via Elliott Way, Lobs Hole traffic via Link Rd. Heavy vehicles may travel to and from the site via the Secondary Access Routes and Water Supply Routes, (Paddy's River Flats/existing Transmission Line access tracks) subject to the requirements in condition B31, to the satisfaction of the relevant roads authority/manager. These routes must be adhered to by HV's and LV's.



### Transport

#### Over-Dimensional and heavy vehicle restrictions

The applicant must keep accurate records of the number of heavy vehicles entering or leaving the site each day.

#### Designated Over-Dimensional and Heavy vehicle access Route

All over-dimensional and heavy vehicles associated with the development must travel to and from the site the approved site access points.

#### TRAFFIC MANAGEMENT PLAN SIGN-OFF

Project Manager:	_____	Date:	_____
Construction Manager:	_____	Date:	_____
Person completing TTMP:	_____	Date:	_____
HSE Advisor Signature:	_____	Date:	_____

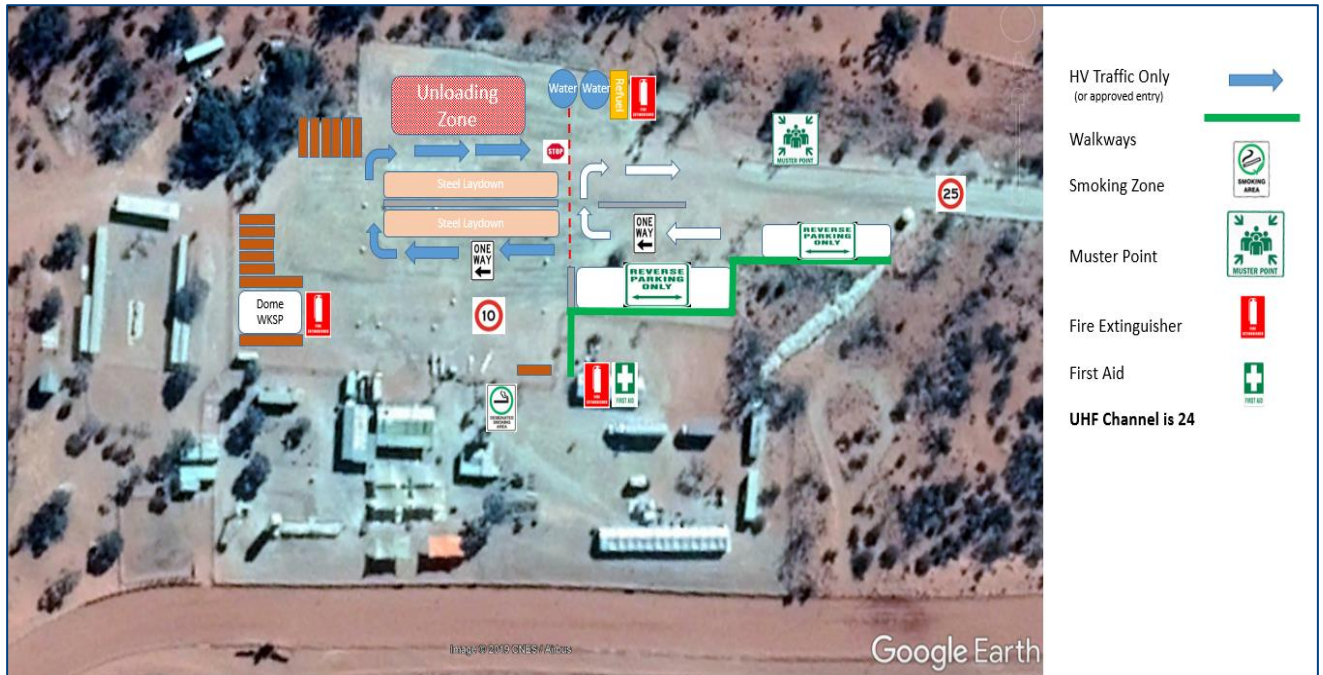
Snowy 2.0 TCP  
Traffic and Transport Management Plan

## **APPENDIX B : Example Traffic Management Diagrams**

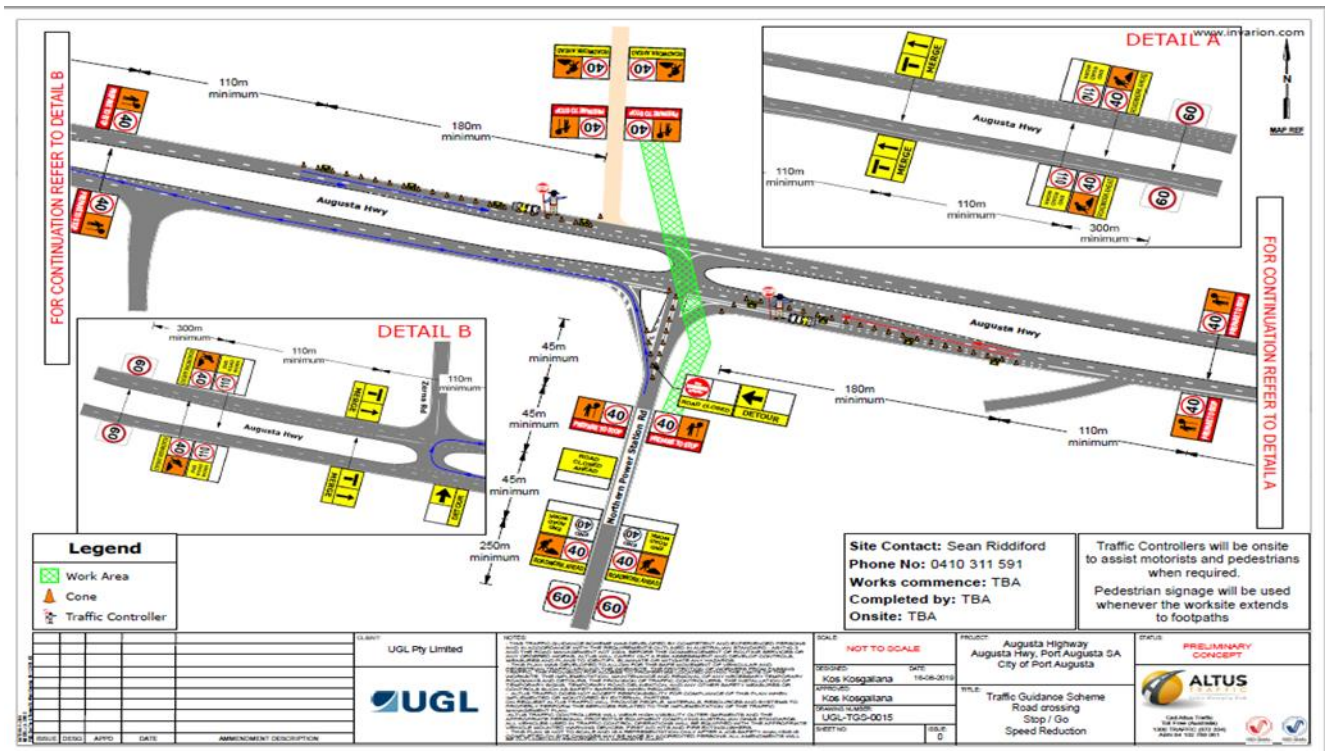


## Snowy 2.0 TCP Traffic and Transport Management Plan

PLACEHOLDER TO UPDATE WHEN POSSESSION OF SITE TAKES PLACE PRE CONSTRUCTION WORKS



Note: **Examples only** of Traffic Management Diagram. Area specific plans to be completed prior to commencement of works. The Plan will be updated in response to changes that may impact on the public's use of the road network and will be communicated to the public and relevant road authorities in accordance with the Traffic and Engagement Communication Plan (refer Section 5.3)



## APPENDIX C : Fatigue Management Procedure

## **APPENDIX C FATIGUE MANAGEMENT PROCEDURE**

# FATIGUE MANAGEMENT PROCEDURE

## Maragle Substation and 330kV Transmission Line Connections

### TABLE OF CONTENTS

1.	Purpose.....	1
2.	Scope .....	1
3.	Procedure .....	2
3.1	WORKFLOW .....	2
3.2	IDENTIFY FATIGUE IMPACT.....	2
3.3	IDENTIFY FATIGUE LIKELIHOOD .....	2
3.4	REVIEW INSTANCES OF FATIGUE .....	2
3.5	DETERMINE ROLES SUSCEPTIBLE TO FATIGUE .....	3
3.6	IDENTIFY ROSTERING ARRANGEMENTS .....	3
3.7	RISK CONTROLS.....	3
3.8	UPDATE HSSE RISK REGISTER .....	7
3.9	FATIGUE MANAGEMENT PLAN – RAIL SAFETY WORK.....	7
3.10	MONITORING & EVALUATION.....	9
3.11	INDUCTION & TRAINING.....	10
3.12	INCIDENT MANAGEMENT AND REPORTING.....	10
4.	Records.....	11
5.	References.....	11
	Appendix A RESPONSIBILITIES .....	12
	Appendix B DEFINITIONS .....	13
	Appendix C FATIGUE GENERAL INFORMATION.....	14

## 1. PURPOSE

The purpose of this procedure is to define the requirements for managing the risks associated with fatigue in UGL workplaces.

NOTE: This procedure is designed to guide the Risk Management activities associated with managing fatigue, it should therefore be read in conjunction with UGL's HSE Risk Management Procedure.

## 2. SCOPE

This Procedure applies to UGL Group employees, controlled sites, and activities.

Due to the varying internal and external factors associated with shift rostering, this procedure does not mandate maximum shift times, minimum breaks or consecutive shift numbers. Where these are required they should be developed and recorded in the respective safety management plan or supporting procedure.

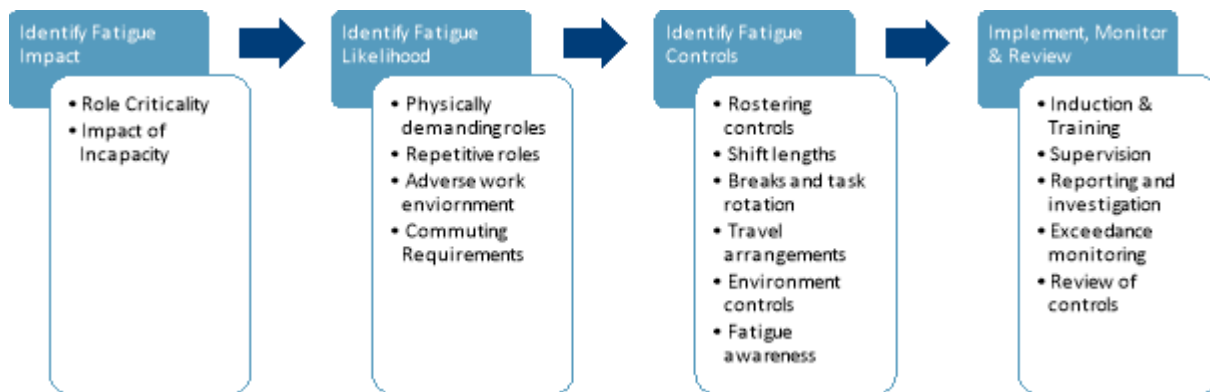
Responsibilities are detailed in Appendix A- Responsibilities

Definitions are detailed in Appendix B - Definitions

## 3. PROCEDURE

The risks associated with fatigue are to be assessed and controls identified as part of the Hazard Identification and Risk Management Process.

### 3.1 WORKFLOW



### 3.2 IDENTIFY FATIGUE IMPACT

In order to assess the impact which a fatigue related incident could have, the criticality of the worker role should be considered. Safety critical roles undertaken are those which involve activities which can place other workers at risk, in particular, where the immediate incapacity of the worker can impact upon others (e.g. Bus or train drivers, crane operators).

### 3.3 IDENTIFY FATIGUE LIKELIHOOD

Having identified the impact which fatigue can have when it affects the typical roles on a project/site, the likelihood of the role being inducing fatigue should be considered using a combination of:

- Previous instances of fatigue;
- Type of role; and
- Work Environment.

### 3.4 REVIEW INSTANCES OF FATIGUE

Research can determine prior evidence of fatigue for similar types of work and work environments. As part of the risk assessment process, consider;

- Incident Reports which indicate fatigue as a contributory factor;
- Self-reports from workers about fatigue; and
- Reports from supervisors about the evidence of fatigue.

#### 3.4.1 Identify roles susceptible to fatigue

Physically demanding, mentally demanding, or repetitive work can increase the likelihood of a worker being affected by fatigue. This likelihood further increases if the task demands are continual, as opposed to periodic.

#### 3.4.2 Review work environment factors

There are a number of factors in the work environment which increase the risk of fatigue. This includes the conditions of the immediate work area, as well as its location.

### 3.5 DETERMINE ROLES SUSCEPTIBLE TO FATIGUE

The risk assessment should have identified a range of risk profiles associated with the roles and tasks undertaken on a project or site.

Safety critical roles which are conducted in arduous conditions, or are physically or mentally demanding present a higher risk than those which are less demanding, or with a lower potential impact (such as office based roles).

### 3.6 IDENTIFY ROSTERING ARRANGEMENTS

Work patterns that involve increased likelihood of fatigue are common place in the environments in which UGL operates. As a result, diligence must be applied to identifying the appropriate controls required to minimise the risk of fatigue related incidents.

### 3.7 RISK CONTROLS

Having identified the impact and likelihood of fatigue affecting workers performing roles and consideration shall be given to relevant developments in research related to fatigue and any technology that may be applied to manage work-related fatigue when implementing control measures.

Controls shall be identified so far as is reasonably practicable in accordance with the hierarchy of controls:

Type of Control	Example
Elimination	Eliminating night shift in some work areas, or for 'high risk' tasks
Substitution	Increasing the length of breaks in a shift
Engineering Controls	Improving ventilation and heating to improve alertness
Administrative Controls	Procedures and training programs for control of fatigue
PPE	Hearing protection devices may not provide sufficient attenuation over a 12 hour a opposed to an 8 hour shift

Unless the risk can be eliminated, a range of control measures from across the hierarchy will need to be put in place. In particular, vigilance by supervisors, monitoring whether workers are experiencing fatigue is a fundamental control measure that will support all other risk control measures.

The following sections describe the issues associated with fatigue and suggest controls to be considered.

#### 3.7.1 Roster Development Controls

Due to the contractual arrangements in which UGL operates, rostering arrangements are often determined by others. However should the rostering arrangements pose a risk of incident, agreement should be sought on the determination of appropriate controls, including:

Risk factor	Issues	Controls for consideration
<b>Night shifts</b> , including the number of consecutive night shifts	<ul style="list-style-type: none"> <li>• Are too many consecutive night shifts worked?</li> <li>• Are tasks requiring sustained physical or mental effort undertaken on night shift?</li> <li>• Are complex physical or mental tasks undertaken on night shift?</li> <li>• Do night shift workers have difficulties getting undisturbed sleep during the day?</li> </ul>	<ul style="list-style-type: none"> <li>• Eliminate or limit night work.</li> <li>• Limit the number of consecutive night shifts worked.</li> <li>• Minimise or redesign routine administrative tasks to ensure workers can focus on core duties during their night work.</li> <li>• Improve the order, speed, direction and length of rotation of the shift cycle.</li> <li>• Ensure adequate time off after a set of night shifts.</li> </ul>
<b>Long hours of work in a single shift.</b> This includes travel time, especially for remote sites.	<ul style="list-style-type: none"> <li>• Does one shift involve more than 12 hours in a day (including call outs)?</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce working hours.</li> <li>• Eliminate the use of extended hours for particular jobs or activities.</li> <li>• Control the length of shifts.</li> </ul>
<b>Long hours of work across a shift cycle</b>	<ul style="list-style-type: none"> <li>• Long hours of active work (total time spent at work including overtime)</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce working hours.</li> <li>• Reduce the number of consecutive day shifts that can be worked.</li> </ul>
<b>Long hours because of on call duties</b>	<ul style="list-style-type: none"> <li>• Are there irregular and unplanned schedules as a result of call-outs?</li> </ul>	<ul style="list-style-type: none"> <li>• Limit use of standby and on-call duties.</li> </ul>
<b>Short breaks between work shifts</b>	<ul style="list-style-type: none"> <li>• Is there enough time between work shifts to allow for adequate sleep:</li> <li>• Enough time in a break for 5 hours uninterrupted sleep in 24 hours (only for one night) AND</li> <li>• Enough time in breaks for 12 hours of sleep in 48 hours (i.e. in two days) AND</li> <li>• Enough time in breaks for 50 hours sleep in 7 days?</li> <li>• Is the break between shifts less than 10 hours?</li> </ul>	<ul style="list-style-type: none"> <li>• Increase the length of breaks between shifts.</li> <li>• Allow for recovery between work periods.</li> <li>• Provide rest days.</li> <li>• Improve the timing of shifts.</li> <li>• Allow for family and social commitments between shifts and shift cycles.</li> </ul>
<b>Short breaks within work shifts</b>	<ul style="list-style-type: none"> <li>• Are breaks within shifts long enough and frequent enough to allow workers to rest, refresh and nourish themselves?</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce the use of split shifts.</li> </ul>
<b>Shift start/finish times</b>	<ul style="list-style-type: none"> <li>• Do any shifts start or finish between midnight and 6am?</li> <li>• Are there split shifts?</li> <li>• Are complex, difficult or strenuous tasks required at the start or end of such shifts?</li> </ul>	<ul style="list-style-type: none"> <li>• Avoid starting or finishing shifts between midnight and 6am.</li> <li>• Minimise the work that has to be done between midnight and 6am.</li> </ul>



Risk factor	Issues	Controls for consideration
<b>Changes to rosters</b>	<ul style="list-style-type: none"> <li>Do workers get sufficient notice of roster changes?</li> <li>Is fatigue management taken into account in roster changes?</li> </ul>	<ul style="list-style-type: none"> <li>Reduce irregular and unpredictable work schedules.</li> </ul>

### 3.7.2 Controlling activities within rosters

Risk factor	Controls
<b>Night shifts</b> , including the number of consecutive night shifts	<ul style="list-style-type: none"> <li>Eliminate the use of nightshifts for particular jobs or activities.</li> <li>Move as much activity as possible to day shifts, particularly work which may be a high risk at night, particularly on the first night of a night shift cycle.</li> <li>Schedule complex tasks for daytime.</li> </ul>
<b>Long hours of work in a single shift.</b> This includes travel time, especially for remote sites.	<ul style="list-style-type: none"> <li>Increase resourcing.</li> <li>Limit the use of overtime, especially unscheduled overtime.</li> <li>Monitor hours of work.</li> </ul>
<b>Long hours because of on call duties</b>	<ul style="list-style-type: none"> <li>Ensure that exchange of shifts does not result in excessive hours.</li> </ul>
<b>Short breaks between work shifts</b>	<ul style="list-style-type: none"> <li>Defer non-urgent work to allow appropriate rest and recuperation for workers.</li> </ul>
<b>Short breaks within work shifts</b>	<ul style="list-style-type: none"> <li>Provide more and/or longer breaks to allow for recovery within work periods.</li> <li>Provide adequate resources to cover breaks.</li> <li>Ensure adequate number and location of crib and toilet facilities.</li> </ul>
<b>Shift start/finish times</b>	<ul style="list-style-type: none"> <li>Minimise the work that has to be done between midnight and 6am.</li> </ul>

### 3.7.3 Task-related Controls

Risk factor	Issues	Controls for consideration
<b>Repetitive or monotonous work</b>	<ul style="list-style-type: none"> <li>Do jobs involve repetitive or monotonous work, e.g. haul truck driving?</li> </ul>	<ul style="list-style-type: none"> <li>Eliminate boring, repetitive jobs.</li> <li>Provide training to allow multi-skilling and effective job rotation.</li> <li>Use alarms and monitors, particularly for solo work (e.g. driving vehicles).</li> </ul>
<b>Sustained physical or mental effort</b>	<ul style="list-style-type: none"> <li>Is the work physically demanding?</li> <li>Is there time pressure due to a heavy workload?</li> <li>Is work fast paced?</li> <li>Is work intensive?</li> <li>Can workers vary work pace or work tasks as desired?</li> <li>Do workers have a say over work tasks or how to carry them out?</li> </ul>	<ul style="list-style-type: none"> <li>Provide suitable resources.</li> <li>Ensure adequate breaks during shifts.</li> <li>Eliminate sources of risks that might exacerbate fatigue (e.g. lack of job control, manual handling, extremes of temperature).</li> <li>Improve communication processes.</li> <li>Improve the duration and timing of work.</li> </ul>

Risk factor	Issues	Controls for consideration
		<ul style="list-style-type: none"> <li>Roster enough workers during peak times and demands.</li> <li>Allow supervisors and workers to reschedule tasks if fatigue becomes a problem.</li> </ul>
<b>Complex physical or mental tasks</b>	<ul style="list-style-type: none"> <li>Is high vigilance and/or concentration required?</li> <li>Are there different demands that can be difficult to combine?</li> <li>Are complex, difficult or strenuous tasks required at the end of shifts or shift cycles?</li> </ul>	<ul style="list-style-type: none"> <li>Ensure safe and efficient shift hand-over.</li> <li>Use alarms and monitors, particularly for solo work (e.g. driving vehicles).</li> </ul>

### 3.7.4 Work environment factors

Risk factor	Issues	Controls for consideration
Excessive commuting times necessary	<ul style="list-style-type: none"> <li>Is significant travel to and from work necessary each day so that time for adequate sleep is reduced?</li> <li>Are long distance commutes necessary at the beginning of a work cycle?</li> </ul>	<ul style="list-style-type: none"> <li>Start work at long distance commute sites on the day AFTER arrival and start travel home on the day AFTER the shift cycle is finished.</li> <li>Assist with travel arrangements, e.g. provide transport.</li> </ul>
Stress	<ul style="list-style-type: none"> <li>Do jobs involve high demand, but low control?</li> <li>Are there poor social relations at work, e.g. bullying?</li> <li>Is there low social support from peers and supervisors at work?</li> <li>Is there low recognition for the effort involved in the work?</li> </ul>	<ul style="list-style-type: none"> <li>Improve job control and the other risk factors associated with stress.</li> <li>Ensure effective channels of communication to allow the monitoring and reporting of fatigue related issues.</li> </ul>
Adverse working conditions	<ul style="list-style-type: none"> <li>Do adverse working conditions exist, e.g. exposure to: <ul style="list-style-type: none"> <li>Noise?</li> <li>Heat?</li> <li>Cold?</li> <li>Dust?</li> <li>Hazardous substances?</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Control exposure to hazardous substances and environments.</li> <li>Provide effective protective clothing and equipment, allowing for different skills.</li> <li>Use heating and cooling to control ambient temperatures to support alertness.</li> </ul>
Non-work related factors	<ul style="list-style-type: none"> <li>To what extent is there evidence of problems as a result of: <ul style="list-style-type: none"> <li>Family commitments?</li> <li>Sleeping disorders?</li> <li>Psychological issues?</li> <li>Alcohol and drug use?</li> <li>Second job/non-paid work?</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Provide suitable professional advice, e.g. an Worker Assistance Program, sleep disorder clinic.</li> <li>Maintain vigilance in identifying non-work related factors.</li> <li>Provide information and education about how non-work related factors can increase the risks of fatigue.</li> </ul>

### 3.8 UPDATE HSSE RISK REGISTER

Having determined the impact and likelihood of fatigue associated with the typical roles undertaken on projects, operations or sites, the HSSE Risk Register should be used to record the information. Controls identified should be listed against each of the roles, and actions assigned to ensure the required implementation and monitoring. The following is an example of how to capture the roles (information in table is not accurate and provided for guidance only);

Role	Impact	Likelihood	Risk	Controls Required	Risk	Actions
Crew Driver	Severe	Unlikely	19	<ul style="list-style-type: none"> <li>Maximum Shift Length XX hours</li> <li>Maximum XX consecutive shifts</li> <li>Pre-Employment and Ongoing Health surveillance</li> </ul>	15	XX to ensure position description details Fatigue controls
Draftsperson, Project Engineer, Office Administrator	Serious	Unlikely	10	<ul style="list-style-type: none"> <li>Standard Roster Arrangements</li> </ul>	10	

### 3.9 MONITORING & EVALUATION

Unlike impairment from the effects of alcohol or other drugs, there is no simple measure to indicate the levels of fatigue. However there are a number of simple tools and options available to aid the monitoring of fatigue.

In accordance with the Just and Fair Culture framework, UGL workers are encouraged to take their responsibilities to obtain sufficient sleep seriously, but feel confident that, if on occasion they feel too tired to work safely, they will not be punished for honestly declaring this so that alternative arrangements can be made.

#### 3.9.1 Monitoring fatigue in the workplace

Supervisors are required to look for signs of stress, fatigue and illness, or behaviour that is unusual or different from normal in their workforce. The following table gives some examples of the symptoms which indicate fatigue, and the likely level associated.

Likely level of fatigue

Signs/Symptoms

Early warning signs of fatigue which should prompt people to look out for more conclusive evidence of fatigue

- Fidgeting
- Rubbing the eyes

Signs of moderate fatigue- suggesting performance is being affected. Take these seriously – it is not necessary to fall asleep to make a

- Frequently yawning
- Staring blankly
- Frequently blinking

Signs of severe fatigue – Liable to brief uncontrollable "micro sleeps" risk of errors very high

- Nodding head
- Difficulty keeping eyes open & focused

- Long Blinks

Where any worker or their colleague believes that a person is not fit for work, he or she must immediately notify their supervisor.

In the event that the supervisor determines that a worker is not fit for duty, the Supervisor must consult with the affected person to determine whether they are suffering from a condition that could result in their fitness for work being compromised.

On assessment of the degree of debilitation, professional assistance in confidential consultation with the Supervisor and/or HSSE Professional can be arranged through their own medical practitioner or through the company Employee Assistance Program (EAP).

### 3.9.2 Assessing Fatigue

Sampling fatigue amongst workers can be a useful tool to ascertain the effectiveness of the controls identified to mitigate the risk of fatigue. The following scale can be utilised to enable workers to identify the extent to which they are affected by fatigue:

1. Fully alert, wide awake.
2. Very lively, responsive, but not at peak.
3. Okay, somewhat fresh.
4. A little tired, less than fresh.
5. Moderately tired, let down.
6. Extremely tired, very difficult to concentrate.
7. Completely exhausted, unable to function effectively.

### 3.9.3 Reviewing Fatigue Exceedances

Reviews should be conducted periodically to ensure that the fatigue controls identified in the HSSE Risk Register have been implemented and are being applied. This may be further substantiated by reviewing records of work hours, shift patterns etc. Exceedances should be recorded with actions to prevent recurrence determined accordingly.

These monitoring requirements can be included in the Checkit Planner. Where required, the HSSE Professional will schedule regular reviews of the Fatigue Management Plan to ensure that all workers and contractors are complying with the plan.

## 3.10 INDUCTION & TRAINING

The controls identified for managing fatigue on projects/sites/operations should be included in the respective project induction. Typical induction content regarding fatigue includes;

- Basic information on the causes of fatigue and the importance of sleep;
- The effects of circadian rhythms on alertness and performance;
- Personal responsibility for the signs of fatigue and the need to report; and
- Details of actions to follow when fatigue is identified.

Where further training on the development and implementation of fatigue management strategies is required the following unit of competency is available;

TDTF1097B: Apply Fatigue Management Strategies through an RTO.

## 3.11 INCIDENT MANAGEMENT AND REPORTING

When an incident occurs, the HSSE Professional will review the incident to discover the causes, including fatigue in accordance with UGL's Incident Management Procedures.

## 4. RECORDS

Project or Operations Managers are responsible for ensuring that the following records are developed, maintained and retained in accordance with the respective Quality Management Plan:

- HSSE Risk Register and Hazard Summary Report;
- SWMS/JHA;
- Fatigue Management Plan;
- Pre-start Safety Action Plan; and
- Fatigue Prevention Permit.

## 5. REFERENCES

WorkCover NSW & WorkSafe Victoria (2008) Fatigue Prevention in the Workplace.

WorkCover NSW (2010) Long Distance Truck Driver Fatigue – Compliance at a Glance.

WorkCover NSW (2005) Factsheet for Consignors and Consignees: Managing Long Distance Truck Driver Fatigue in NSW.

Department of Labour, Wellington, New Zealand, Managing Stress and Fatigue in the workplace. ISBN 0-477-03689-9.

Health and fatigue – an introduction programme for drivers of heavy motor vehicles – NZ Transport Authority, March 2015.

## APPENDIX A RESPONSIBILITIES

Position	Responsibilities
Project or Operations Managers	<ul style="list-style-type: none"> <li>• Ensure that fatigue-related risks are identified in the HSSE Risk Register</li> <li>• Ensure that Safety critical roles and appropriate controls are identified as soon as practicable</li> <li>• Ensure fatigue controls are implemented, monitored and incidents assessed to consider whether fatigue was a contributory factor</li> </ul>
Supervisors (e.g. Technical Coordinator, Team Leader, Shift Supervisor, Leading Hand)	<ul style="list-style-type: none"> <li>• Be aware of the fatigue controls required</li> <li>• Be aware of the signs of fatigue and the potential impact</li> <li>• Encourage workers to self-disclose and identify any risk of fatigue.</li> <li>• Remind workers of fatigue management requirements during prestart meetings.</li> <li>• Take appropriate action when signs of fatigue are detected</li> </ul>
HSSE Professional	<ul style="list-style-type: none"> <li>• Assist with the development of the HSSE Risk Register, the identification of safety critical workers and the identification and implementation of appropriate fatigue controls</li> <li>• Review incidents and near-misses to identify any issues with fatigue.</li> <li>• Provide assistance to sites to monitor and prevent fatigue.</li> </ul>
Workers	<ul style="list-style-type: none"> <li>• Be aware of the risk of fatigue</li> <li>• Be aware of the fatigue controls identified for the role performed</li> <li>• Advise Supervisor if any personal circumstances may be causing fatigue</li> <li>• Take sufficient breaks between shifts to prevent fatigue.</li> </ul>

## APPENDIX B DEFINITIONS

Term	Definition
Fatigue	A state of perceived weariness that can result from prolonged working, heavy workload, insufficient rest and inadequate sleep
Head Carrier	A freight transport (motor vehicle) business, where the truck driver is not self-employed
RTO	Registered Training Organisation
Shift Work	Work outside of normal daylight hours (7am to 6pm)
UTake5	Process used by UGL to manage risk assessments.
WHS Regulator	Workplace Health and Safety Regulator - refers to the statutory authority or government agency with responsibility for regulating work health and safety laws in local jurisdictions.  E.g. Workplace Health and Safety QLD, WorkCover NSW, WorkSafe VIC
Work Cycle/ Roster	The working period scheduled between any significant break away from work: This includes (as examples): <ul style="list-style-type: none"> <li>• Two weeks on, one week off;</li> <li>• Three weeks on, one week off,</li> <li>• Nineteen days on, nine off; and</li> <li>• Four weeks on, one week off etc.</li> </ul>
Workers	Persons engaged in carrying out work activities. Includes UGL workers, contractors, labour hire staff and other personal such as volunteers, unpaid work-experience staff and visitors.



## APPENDIX C FATIGUE GENERAL INFORMATION

### What is Fatigue?

Fatigue is "a state of weariness resulting in a reduced ability to perform work safely and effectively. A fatigued person will:

- Be less alert;
- Less able to process information;
- Take longer to react and make decisions;
- Have less interest in working; and
- Be more prone to errors compared to a person who is not fatigued.

### What causes Fatigue?

Inter-related causes of fatigue include:

- The time of day that work takes place;
- The length of time spent at work and in work related duties;
- Changes in working times, e.g. time zones, change from day to night shift;
- The type and duration of a work task and the environment in which it is performed, e.g. task repetition;
- The quantity and quality of rest obtained prior to and after a work period;
- Activities outside of work, such as second jobs and family commitments; and
- Individual factors such as sleeping disorders.

Signs of fatigue can include:

- Unpleasant muscular weariness;
- Tiredness in everyday activities;
- Reduced coordination and alertness; and
- Lapses in concentration;

Fatigue can also result in long term health problems such as:

- Digestive problems;
- Heart disease;
- Stress; and
- Mental illness.

### Why fatigue is a risk to UGL?

Fatigue causes an increased risk of incidents through lack of alertness and concentration on tasks. When workers are fatigued, they are more likely to exercise poor judgement and have a slow reaction to signals. Fatigued workers are less able to respond effectively to changing circumstances.

### Factors contributing to fatigue

There are five factors recognised as contributing to fatigue-related performance degradation:

- The duration of a duty period (time on task), and the rest breaks between shifts;

- Inadequate sleep (or sleep debt), which results from inadequate duration and quality of prior sleeps;
- Working and sleeping against natural body rhythms that normally program people to sleep at night and be awake and work during the day (Circadian effect);
- The type of task being undertaken; and
- Environmental factors.

## **APPENDIX D : Snow & Ice Traffic Management Plan**

# Snow & Ice Traffic Management Plan

Snowy 2.0 Transmission Connection Project

Stage 1 Document Number: 3200-0645-PLN-022-SIMP

Stage 2 Document Number: HLW-HLJV-PRW-ENM-PLN-000021 - Appendix D

**TransGrid**  
Date 18/09/2024

Snowy 2.0 TCP  
Snow & Ice Traffic Transport Management Plan

## Document Control

## Approvals

<b>Title</b>	Snowy 2.0 Transmission Connection Project – Snow & Ice Traffic Management Plan
<b>Approved on behalf of Transgrid (Snowy 2.0 TLC) by</b>	Andrew Buttigieg
<b>Signed</b>	
<b>Dated</b>	
<b>Approved on behalf of Transgrid HumeLink by</b>	Jeremy Roberts
<b>Signed</b>	
<b>Dated</b>	
<b>Approved on behalf of UGL by</b>	Louis Linde
<b>Signed</b>	
<b>Dated</b>	
<b>Approved on behalf of HLWJV by</b>	Tim Burns
<b>Signed</b>	
<b>Dated</b>	

## Snowy 2.0 TCP Snow & Ice Traffic Transport Management Plan

### Version Control

Revision	Date	Description	Author	Reviewer	Approver
0.02	15/05/2023	Initial issue of combined TTMP	Geoff Fletcher	Ian Rembridge	Trevor Noble
0.03	06/09/2023	Revised Transgrid Comments	Ian Rembridge	Darrell Van Bruchem	Trevor Noble
0.04	04/05/2024	Revised TG and NPWS Comments	Ian Rembridge	Darrell Van Bruchem	Tim McCarthy
0.05	14/06/2024	Revised to Consider Winter Works	Ian Rembridge	Darrell Van Bruchem	Tim McCarthy
0.06	15/05/2023	Revised Stakeholder Comments	Ian Rembridge	Darrell Van Bruchem	Tim McCarthy
0.07	18/09/2024	Update to include Stage 2	Ian Irwin	Brendan Toohey	Louis Linde/Tim Burns

### Distribution of controlled copies

This Environmental Management Plan is available to all personnel and sub-contractors via the Project document control management system.

The document is uncontrolled when printed. One controlled hard copy of the CEMP and supporting documentation will be maintained by the Quality Manager at the Project office and relevant documentation is available on the Snowy 2.0 TCP website [Snowy 2.0 Transmission Connection | Transgrid](#)).

Copy number	Issued to	Version



# Snowy 2.0 TCP

## Snow & Ice Traffic Transport Management Plan

### Contents

<b>1. Introduction.....</b>	<b>7</b>
1.1. Background.....	7
1.2. Purpose.....	7
1.3. Scope.....	7
<b>2. Objectives .....</b>	<b>8</b>
2.1. Requirements.....	8
<b>3. Environmental Considerations .....</b>	<b>10</b>
3.1. Weather Monitoring .....	10
3.2. Training Snow & Ice .....	10
3.3. Snow Chains.....	11
3.4. Road Upgrades.....	11
3.5. Maintenance .....	12
<b>4. Compliance Management.....</b>	<b>13</b>
4.1. Inspection and Maintenance of Work Areas During Winter.....	14
4.2. Inspections and Auditing .....	14
4.3. Reporting .....	14
<b>5. Personnel .....</b>	<b>15</b>
5.1. Communications Reporting Protocol .....	15
5.2. Clothing.....	15
5.3. Emergency Equipment.....	15
5.4. Emergency Response .....	15

### Figures

Figure 5-1 Emergency Access for Eastern Transmission Line Project Area .....	11
--	----

### Tables

Table 2-1 Compliance Obligations .....	8
Table 2-2 Reporting Obligations .....	9
Table 4-1 Regional and Local Roads Utilised for Main Work .....	12



## Snowy 2.0 TCP Snow & Ice Traffic Transport Management Plan

### Definitions

Term	Definition
Aboriginal Object	Any deposit, object, or material evidence (not being a handcraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains
Compliance audit	Verification of how implementation is proceeding with respect to a Construction Environmental Management Plan (CEMP) (which incorporates the relevant approval conditions).
Contractor or Principal Contractor	Stage 1 of the scope of works for design and construction the Contractor or Principal Contractor is UGL Pty Ltd Stage 2 of the scope of works for design and construction the Contractor or Principal Contractor is UGL/CPB Joint Venture. Any reference to the 'Contractor' relates to the activities of both appointed Contractors (UGL and UGL/CPB Joint Venture), but only as is relevant to the appointed stage of works.
Environmental aspect	Defined by AS/NZS ISO 14001:2015 as an element of an organisation's activities, products or services that can interact with the environment.
Environmental impact	Defined by AS/NZS ISO 14001:2015 as any change to the environment, whether adverse or beneficial, wholly, or partially resulting from an organisation's environmental aspects.
Environmental incident	An unexpected event that has, or has the potential to, cause harm to the environment and requires some action to minimise the impact or restore the environment.
Environmental objective	Defined by AS/NZS ISO 14001:2015 as an overall environmental goal, consistent with the environmental policy, that an organisation sets itself to achieve.
Environmental policy	Statement by an organisation of its intention and principles for environmental performance.
Environmental target	Defined by AS/NZS ISO 14001:2015 as a detailed performance requirement, applicable to the organisation or parts thereof, that arises from the environmental objectives and that needs to be set and met in order to achieve those objectives.
Environmental Representative	A suitably qualified and experienced person independent of Snowy 2.0 Transmission Line Project design and construction personnel employed for the duration of construction. The principal point of advice in relation to all questions and complaints concerning environmental performance.
Snowy 2.0 Transmission Line Approvals	Snowy 2.0 Transmission Line approvals include: Snowy 2.0 Transmission Line Infrastructure Approval NSW SSI 9717 Snowy 2.0 Transmission Line EPBC Approval Cth EPBC 2018/8363
Non-compliance	Failure to comply with the requirements of the HumeLink Approvals or any

Snowy 2.0 TCP  
Snow & Ice Traffic Transport Management Plan

Term	Definition
	applicable licence, permit or legal requirements.
Non-conformance	Failure to conform to the requirements of HLW system documentation including this CEMP or supporting documentation.
Planning Approval Documentation	The NSW planning approval documents, as they relate to the Snowy 2.0 Transmission Line and as listed in CoA A2 of the NSW Infrastructure Approval for HumeLink (SSI 9717)
Principal, the	Transgrid
Synergy	UGL-CMS incident management software program to manage, report, record and take action on emergency and incidents.

Snowy 2.0 TCP  
Snow & Ice Traffic Transport Management Plan

## Acronyms and Abbreviations

Term	Definition
<b>CEMP</b>	Construction Environmental Management Plan
<b>COA</b>	Conditions of Approval
<b>CSSI</b>	Critical State Significant Infrastructure
<b>DPE</b>	Department of Planning and Environment
<b>DPI</b>	Department of Primary Industries
<b>EPA</b>	Environment Protection Authority
<b>EPL</b>	Environmental Protection License
<b>ERP</b>	Emergency Response Plan
<b>EMS</b>	Environmental Management System
<b>FCNSW</b>	Forestry Corporation NSW
<b>FRNSW</b>	Fire and Rescue NSW
<b>HSSE</b>	Health, Safety, Security and Environment
<b>KM</b>	Kilometers
<b>KNP</b>	Kosciuszko National Park
<b>KV</b>	Kilovolts
<b>MTCP</b>	Marine Traffic Control Plans
<b>MW</b>	Megawatt
<b>MWH</b>	Megawatt hours
<b>NEM</b>	National Electricity Market
<b>NPWS</b>	National Parks and Wildlife Service
<b>NSW</b>	New South Wales
<b>PC</b>	Principal Contractor as defined.
<b>RFS</b>	Rural Fire Service
<b>SHL</b>	Snowy Hydro Limited
<b>TfNSW</b>	Transport for New South Wales
<b>UGL</b>	UGL Engineering Pty Ltd
<b>WHS</b>	Work Health and Safety
<b>FGJV</b>	Future Generation Joint Venture

## 1. Introduction

### 1.1. Background

In 2020, Snowy Hydro Limited (SHL) obtained approval to expand the existing Snowy Mountains Hydro-electric Scheme (Snowy Scheme) by linking the existing Tantangara and Talbingo reservoirs through a series of underground tunnels and constructing a new underground hydro-electric power station (Snowy 2.0). Snowy 2.0 is expected to increase the generation capacity of the Snowy Scheme by almost 50 percent, providing an additional 2000 megawatts (MW) of generating capacity, and making approximately 350,000 megawatt hours (MWh) of large-scale storage available to the National Electricity Market (NEM).

To connect Snowy 2.0 to the NEM, a new transmission connection is required. NSW Electricity Networks Operations Pty Ltd as a trustee for NSW Electricity Operations Trust (known as Transgrid) received development approval on 14 September 2022 under Part 5 Division 5.2 of the NSW Environmental Planning and Assessment Act 1979 (EP&A Act) for the construction and operation of the Snowy 2.0 Transmission Connection Project (the Project) to enable the grid connection of Snowy 2.0 to the NEM. The Project has been declared Critical State Significant Infrastructure (CSSI) under the New South Wales (NSW) State Environmental Planning Policy (State and Regional Development) 2011 a part of the CSSI declaration for the Snowy 2.0 and Transmission Project in Clause 9, Schedule 5.

### 1.2. Purpose

The purpose of this SITMP is to describe how the Project vehicles will interact with the road authority/manager and the public to control the movement of Project personnel, plant, light vehicles in extreme weather conditions including inclement weather, especially snow and ice. The plan is developed in line with the UGL's Safety Management System and will be implemented and managed across the project to prevent harm to the environment, project staff, subcontractors, and the public.

The key objective of the SITMP is to ensure that any potential plant or vehicle impacts during periods of extreme weather, including snow and ice are minimised.

### 1.3. Scope

The Scope of Works is for the design and construction of Maragle 500kV Substation including the 330kV Switching Yard (Maragle Substation) and 330kV Transmission Line Connections.

- Design and construction of Maragle Substation and supporting works.
- Design and construction of two 330kV transmission lines, cut into Line 64, the installation of Optical Fibre Ground Wire (OPGW) on a section of Line 64, and supporting works.

## Snowy 2.0 TCP Snow & Ice Traffic Transport Management Plan

## 2. Objectives

The Snow and Ice Traffic Management Plan addresses the following items as required for Principal Contractor. To achieve this, the Principal Contractors (PC) will:

- Ensure that exposure to the impact of snow and ice on project vehicles is minimised; and
- Provide appropriate training and resources to all personnel;
- Provide information and resources that provides an environment that supports UGL contractors to comply with all relevant legislation and other Project requirements.
- Liaise closely with the road owner agency to ensure snow ice risk mitigation measures are understood, consistent, applied on public roads utilised by the project; and that feedback can be received and any corrective actions applied promptly.
- UGL Contractor will actively limit its exposure to extremes of weather and in particular snow and ice by demobilising all non-essential operational field staff from the project and implement a reduction in works (weather dependent) for the period 1st June till 31st August (winter period).

### 2.1. Requirements

Approvals and reporting obligations identified below have been considered and integrated into the Snow and Ice Traffic Management Plan. Compliance and project reporting will support the actionable line items identified below in the Table 1 and reporting obligations in Table 2-1.

Table 2-1 Compliance Obligations

Reference No	Requirement	Document Reference
A12	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.	Section 3.2 Training Snow and Ice
B29	<p>The Proponent must:</p> <ul style="list-style-type: none"> <li>(a) undertake an independent dilapidation survey to assess the: <ul style="list-style-type: none"> <li>(i) existing condition of all local roads on the transport route shown in the figure in Appendix 4 (including local road crossings) prior to construction, upgrading or decommissioning works; and</li> <li>(ii) condition of all local roads on the transport route (including local road crossing): <ul style="list-style-type: none"> <li>• within 1 month of the completion of construction, upgrading or decommissioning works, or within a timeframe agreed to by the relevant roads authority/manager;</li> <li>• on an annual basis during construction, or within a timeframe agreed to by the relevant roads authority/manager;</li> </ul> </li> </ul> </li> <li>(b) repair (or pay the full costs associated with repairing) any damage to local roads on the transport route (including local road crossings):</li> <li>(c) rehabilitate and/or make good any development related damage <ul style="list-style-type: none"> <li>(i) identified during the construction and/or decommissioning works if it could endanger road safety as soon as possible after it is identified but within 7 days at the latest, unless the</li> </ul> </li> </ul>	Section 3.4 Road Upgrades

Snowy 2.0 TCP  
Snow & Ice Traffic Transport Management Plan

Reference No	Requirement	Document Reference
	relevant road (ii) identified in any dilapidation survey completed after the construction, upgrading or decommissioning works within 2 months of the completion of the survey to the satisfaction of the relevant roads authority/manager	
B32	Prior to commencing construction or road upgrades identified in condition B27 (whichever comes first), the Proponent must prepare a Traffic Management Plan for the development in consultation with FCNSW, NPWS, TfNSW, Snowy Valleys Council, Snowy Monaro Regional Council and NSW Police, and to the satisfaction of the Planning Secretary. This plan must include:	
	(d) details of the measures that would be implemented to: <ul style="list-style-type: none"> <li>(i) minimise traffic safety impacts of the development and disruptions to local road users during construction, upgrading or decommissioning works, including:               <ul style="list-style-type: none"> <li>• responding to local climate conditions that may affect road safety, such as snow, ice, fog, dust, wet weather and flooding.</li> <li>• fatigue management.</li> </ul> </li> </ul>	This Plan  Section 3.2 Snow & Ice Training
	(g) include a detailed: <ul style="list-style-type: none"> <li>(ii) Driver's Code of Conduct;</li> <li>(iv) Snow &amp; Ice Traffic Management Plan;</li> </ul>	Section 3.2 Snow & Ice Training
	(h) include a program to: <ul style="list-style-type: none"> <li>(i) ensure drivers working on the development receive suitable training on the code of conduct and any other relevant obligations under the Traffic Management Plan;</li> <li>(ii) record and track vehicle movements; and</li> <li>(iii) monitor and publicly report on the effectiveness of these measures.</li> </ul>	Section 4 Compliance Management

Table 2-2 Reporting Obligations

Condition	Report Notification	Timing	Purpose
C7	Notification of incident	Immediately upon becoming aware of the incident	Information
C8 – C9	Notification of non-compliance	Within seven days upon becoming aware of any non-conformance. Note: a non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.	Information

All personnel working on the Project will comply with the requirements of the conditions of approval and the conditions relevant to snow and ice traffic management presented in this plan - Table 2-1 and Table 2-2.

## 3. Environmental Considerations

### 3.1. Weather Monitoring

The PC will utilise the Bureau of Meteorology website to inform personnel of inclement weather and will in consultation provide weather warning updates to all UGL contractor across the Project.

Potential risks from severe weather or snow and ice events will be assessed regularly throughout the day. Where works planning identifies potential risks, this will be communicated to all project drivers (including sub-contractors and transport companies) via daily toolbox discussions and as required by radio communications.

Where road authorities close roads due to flooding or snow/ice, the PC will direct all employees and contract drivers to layup until the flooding has subsided or snow and ice removal has been completed, or fit chains if appropriate.

Section 3.2 outlines the scope of induction and covers areas that have direct influence on compliance for vehicle operations across the project areas.

### 3.2. Training Snow & Ice

All PC personnel, delivery drivers and sub-contractors will undergo site induction training relating to traffic, transport and access management issues. The induction training will address elements related to traffic management including:

- Knowledge of and requirements for the TTMP and Snow & Ice Traffic Management Plan;
- Relevant legislation;
- Roles and responsibilities for traffic management;
- Light vehicle and heavy vehicle routes to and from site;
- Arrangements for transport of workers to site;
- Traffic, transport and access mitigation and management measures;
- Procedures to be implemented in the event of an incident (e.g. traffic accidents).
- All drivers shall be fit to drive 0.00 BAC
- Mobile phones shall not be operated in moving vehicles, plant or equipment. Where mobile phones are to be used, the vehicle must be stationary and parked in a safe place
- All vehicles and mobile equipment shall be fitted with seat belts. All personnel shall wear, and correctly fit and secure seatbelts provided at all times

Targeted training in the form of toolbox talks or specific training will also be provided to personnel with a key role in traffic, transport, and access management.

Examples of training topics include:

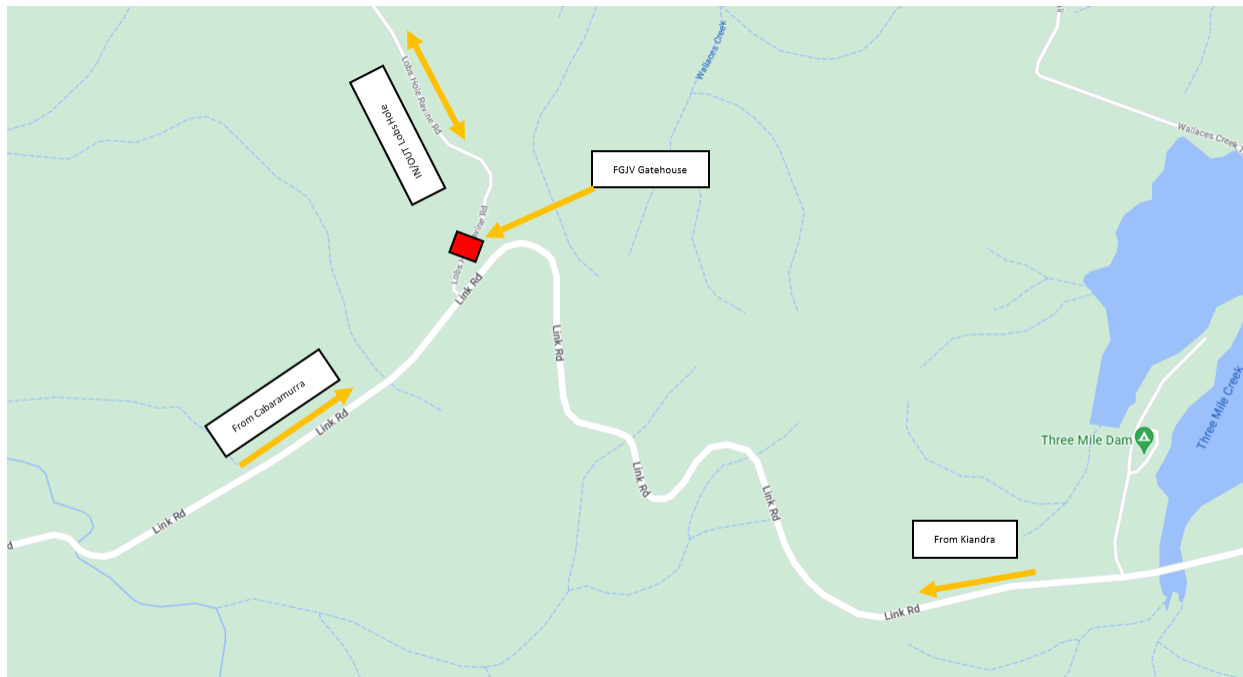
- Vehicle movement plans – approved heavy vehicle haulage routes, safe entry and exit and other
- Access restrictions;
- Driver behaviour and the conduct for heavy vehicles including permitted parking and layup areas;
- Delivery driver's induction that includes safe protocols to be followed whilst travelling on internal and external roads. The briefing will reinforce posted speed limits, advisory speeds, and Historic high accident points on winding sections of road;
- Driving in snow and during icy conditions; and



## Snowy 2.0 TCP Snow & Ice Traffic Transport Management Plan

- Driver fatigue awareness training.
- De-icing & demisting of windscreens
- 4WD and HV operations in a snow environment
- Journey management and minimum clothing requirements

Figure 3-1 Emergency Access for Eastern Transmission Line Project Area



### 3.3. Snow Chains

In accordance with TfNSW and NPWS requirements, all PC, sub-contractors and Transgrid light two-wheel drive and heavy vehicles (including trailers) will be required to carry snow chains between the June and October long weekends when travelling to and from project sites. The use of chains will be at the discretion of drivers or the direction of TfNSW, NPWS officers (on NPWS roads) and NSW Police.

All project personnel that operate a 2WD vehicle on the project will be required to carry snow chains and will be trained and deemed competent in the fitting of and driving with snow chains.

PC project four-wheel drive vehicles are not required to carry snow chains, however drivers will undertake snow and ice driver training.

### 3.4. Road Upgrades

External road and intersection upgrades required for the Snowy 2.0 project, are detailed in Section 5.1 of the Transport Management Plan. Where required, all road and intersection upgrades will be designed and constructed to comply with Ausroad and TfNSW specifications relevant to snow and ice management.

These measures may include:

- Installation of snow poles / guideposts / height markers
- Installation of additional warning sign for upcoming curves combined with advisory speeds
- Marking of centrelines with high visibility paint suitable for snow and ice conditions where

## Snowy 2.0 TCP Snow & Ice Traffic Transport Management Plan

- appropriate; and
- Project specific snow chain fitting bays on internal project roads

Road upgrades and maintenance will be managed through the following measures:

- (a) undertake an independent dilapidation survey to assess the:
  - (i) existing condition of all local roads on the transport route shown in the figure in Appendix 4 (including local road crossings) prior to construction, upgrading or decommissioning works; and
  - (ii) condition of all local roads on the transport route (including local road crossing):
    - within 1 month of the completion of construction, upgrading or decommissioning works, or within a timeframe agreed to by the relevant roads authority/manager;
    - on an annual basis during construction, or within a timeframe agreed to by the relevant roads authority/manager;
- (b) repair (or pay the full costs associated with repairing) any damage to local roads on the transport route (including local road crossings):
- (c) rehabilitate and/or make good any development related damage.
  - (i) identified during the construction and/or decommissioning works if it could endanger road safety as soon as possible after it is identified but within 7 days at the latest, unless the relevant road
  - (ii) identified in any dilapidation survey completed after the construction, upgrading or decommissioning works within 2 months of the completion of the survey to the satisfaction of the relevant roads authority/manager.

### 3.5. Maintenance

In a flooding or snowfall event, maintenance of public roads will be undertaken by the relevant road authority to ensure there is no build-up of water or snow across the roads, the exception to this is for roads located within the project boundary where maintenance works will be undertaken by Future Generation. Note - Under certain conditions it may not be possible to ensure the roads are able to remain open.

Table 3-1 Regional and Local Roads Utilised for Main Work

Name	Location	Authority
Link Road	Within KNP	NPWS
Elliott Way	Within KNP	NPWS
Lobs Hole Ravine Road	Within project boundary	Future Generation
Mine Trail Road	Within project boundary	Future Generation

## 4. Compliance Management

UGL induction training will address elements related to flooding and snow and ice traffic management including:

- Vehicle routes to and from site;
- Driver behaviour and the conduct for heavy vehicles including permitted.
- Parking, lay-up areas and chain fitting bays; and
- Procedures to be implemented in the event of an incident (e.g. traffic accidents)
- Targeted training in the form of toolbox talks or specific training will also be provided to driving personnel Examples of training topics include:
  - “If it’s flooded, forget it” awareness;
  - Vehicle movement plans – approved heavy vehicle haulage routes, safe entry and exit; and
  - Other access restrictions;
- Delivery driver’s induction that will include safe protocols to be followed whilst travelling on internal and external roads. The briefing will reinforce posted speed limits, advisory speeds;
- Historic high accident points on winding sections of road;
- Driving in snow and during icy conditions; and
- Driver fatigue awareness training.

Daily briefings via toolbox talks or pre-start briefs will be delivered utilising the Project communications procedures for personnel that drive on the project and supervisory staff with a key role in traffic, transport, and access management.

All sub-contracted drivers to the PC that are required to operate heavy and Over Size Over Mass (OSOM) vehicles will be informed of the hazards of driving in alpine conditions via the Project Pre Arrival Safety Flyer, given to all Project Suppliers at engagement. All PC subcontractors will undertake their works in accordance with the TTMP and subordinate plans, including this SITMP. The procurement process for haulage services will include statistical performance of the sub-contractor for the previous 3 years as established for UGL subcontractors.

All personnel required to drive 4WD vehicles or drive in winter conditions will be required to complete additional approved 4WD and Snow and Ice Driver training.

Emergency Preparedness and Response Awareness training will be provided and will address identified incident scenarios. This content is included via inductions, awareness and refresher training and emergency drills.

UGL utilises In Vehicle Monitoring Systems (IVMS) vehicle tracking system software to ensure compliance with project requirements, safety regulations, as well as for monitoring the movement and locations of all vehicle assets (including HVs). The IVMS vehicle monitoring systems enables the PC to actively manage and monitor our fleet by recording data utilising tracking devices. IVMS vehicle tracking systems use hardware and software that tracks and collects data during the vehicle’s operation so that managers and stakeholders can actively manage and monitor fleet vehicles and drivers to ensure optimal performance, as well as strict safety compliance using vehicle speed monitoring devices. All PC Project vehicles and Sub-Contractor vehicles will be required to have IVMS units fitted, with records available on request either routinely or following and incident.

Snowy 2.0 TCP  
Snow & Ice Traffic Transport Management Plan

#### 4.1. Inspection and Maintenance of Work Areas During Winter

The PC and all contractors will reduce construction activities during the winter period, to essential works and works suitable to the conditions to minimise risks associated with extreme weather and exposure. During this period scheduled site safety inspections will be undertaken to ensure the integrity of work compounds and construction sites.

Adverse weather conditions pose a potential threat to the health and safety of personnel undertaking safety, environmental and security inspections during the reduced works period. An appropriate risk review will be considered for the task or provision of additional and appropriate safety measures if the task is considered to be project or safety critical.

The PC will ensure the Project Safety Manager attends all Local Emergency Management Committee (LEMC) meetings during the winter period, to discuss and communicate inspection and maintenance operations as required.

The PC will participate in discussions for winter preparedness and inspection/maintenance with The Client, TfNSW, Police and NPWS prior to and throughout the winter season, either through the TTLG or other forums such as the Snow Clearing Operations stakeholders meeting coordinated by NPWS.

#### 4.2. Inspections and Auditing

Where risk assessment or safety inspections identify opportunities for improvement, the actionable item will be managed according to the non-conformance risk profile. The PC will rectify the non-conformance as soon as possible and no later than 7 days after identification.

#### 4.3. Reporting

The PC will report to the Client and other agencies as required on snow and ice related traffic management issues specific to the project.

Reporting requirements and responsibilities will include:

- Reporting of non-compliances and incidents to Transgrid;
- Dissemination of information across the PC contractors relating to notification of works commencement (including commencement and completion of the required road upgrades);
- The Client and / or other agency environmental inspection reports.

## 5. Personnel

During travel in snow or ice conditions as part of the winter Project Operations, two (2) vehicles will transit to Maragle site to assess the viability of transiting staff to and from Tumbarumba. If snow and/or ice is observed or if vehicle transit presents a potential risk, the PC will stand down works for the day until safe access to site can be achieved. Travel to and from the Lobs Hole Project Site will be assessed and monitored via FGJV notices and gazetted road closures (Snowy Mountains Hwy and Link Rd), assessed daily and as required during winter months. The 4WD vehicles used for site assessment party to the sites shall also be fitted with a vehicle mobile radio, fog lights and amber rotating flashing light.

### 5.1. Communications Reporting Protocol

Communication requirements for all the PC's personnel who are travelling to remote or alpine locations must be aware that there are limited radio communication opportunities and mobile phone black spots in the mountains, and these should be considered. All personnel should allow extra time for travel during inclement weather conditions.

### 5.2. Clothing

Due regard must be given to situations where weather conditions can change unexpectedly. It is essential that appropriate and adequate clothing be accessible to protect personnel during such adverse weather conditions. The basic philosophy used when selecting clothing items recognises a number of important characteristics.

These include:

- Maintenance of body warmth by insulation
- High visibility water/weather proofing of outer clothing layers
- The need for transmission of moisture away from the body, particularly when undertaking high physical activity.
- The water, snow and windproof characteristics of synthetic fabrics being utilised for outer garments.
- Ultraviolet Radiation and wind burn protection
- Durability of the clothing

### 5.3. Emergency Equipment

The amount and type of equipment to be carried by personnel working at a remote location will depend on the means of transport as well as the nature and duration of the tasks associated with travel. Consideration should be given to additional or alternative equipment, appropriate to the location and type of work to be undertaken.

### 5.4. Emergency Response

In the event of an emergency, the emergency response button on the vehicle communication radio should be used.

- If a member of the party is injured, the other member should immediately carry out first aid (DRABC if required).
- In an emergency try calling 000 or 112 on your mobile phone. Mobile phone reception is poor

Snowy 2.0 TCP  
Snow & Ice Traffic Transport Management Plan

across the project area.

- Protect the patient from the cold and/or heat and treat for shock.
- Follow the alpine survival guide and first aid training to ensure the best possible outcomes for the person(s) involved.
- If radio communication is not possible in that location, do not leave the patient unattended. If attempts to communicate have been unsuccessful and the situation is life threatening, activate an EPIRB (Emergency Personal Indication Radio Beacon) in accordance with instructions on the device.
- Be prepared to manage the casualty in field conditions.

## APPENDIX E : Heavy Vehicle Salvage Plan



# Heavy Vehicle Salvage Plan

Snowy 2.0 Transmission Connection Project

Stage 1 Document Number: 3200-0645-PLN-023-TMP-HVSP

Stage 2 Document Number: HLW-HLJV-PRW-ENM-PLN-000021 - Appendix E

**TransGrid**  
Date 18/09/2024

Snowy 2.0 TCP  
Heavy Vehicle Salvage Plan

## Document Control

### Approvals

<b>Title</b>	Snowy 2.0 Transmission Connection Project – Snow & Ice Traffic Management Plan
<b>Approved on behalf of Transgrid (Snowy 2.0 TLC) by</b>	Andrew Buttigieg
<b>Signed</b>	
<b>Dated</b>	
<b>Approved on behalf of Transgrid HumeLink by</b>	Jeremy Roberts
<b>Signed</b>	
<b>Dated</b>	
<b>Approved on behalf of UGL by</b>	Louis Linde
<b>Signed</b>	
<b>Dated</b>	
<b>Approved on behalf of HLWJV by</b>	Tim Burns
<b>Signed</b>	
<b>Dated</b>	

Snowy 2.0 TCP  
Heavy Vehicle Salvage Plan

## Version Control

Revision	Date	Description	Author	Reviewer	Approver
0.02	04/11/2022	Initial issue of combined TTMP	Geoff Fletcher	Ian Rembridge	Trevor Noble
0.03	15/05/2023	Revised Transgrid Comments	Ian Rembridge	Darrell Van Bruchem	Trevor Noble
0.04	06/09/2023	Revised TG and NPWS Comments	Ian Rembridge	Darrell Van Bruchem	Tim McCarthy
0.05	04/05/2024	Revised to Consider Winter Works	Ian Rembridge	Darrell Van Bruchem	Tim McCarthy
0.06	14/06/2024	Revised Stakeholder Comments	Ian Rembridge	Darrell Van Bruchem	Tim McCarthy
0.07	18/09/2024	Update to include Stage 2	Ian Irwin	Brendan Toohey	Louis Linde / Tim Burns

## Distribution of controlled copies

This Environmental Management Plan is available to all personnel and sub-contractors via the Project document control management system. An electronic copy can be found on the Snowy 2.0 TCP website.

The document is uncontrolled when printed. One controlled hard copy of the CEMP and supporting documentation will be maintained by the Quality Manager at the Project office and relevant documentation is available on the Snowy 2.0 TCP website [Snowy 2.0 Transmission Connection | Transgrid](#)).

Copy number	Issued to	Version

## Contents

<b>1. Introduction.....</b>	<b>7</b>
1.1. Background.....	7
1.2. Purpose.....	7
1.3. Scope.....	7
<b>2. Objectives .....</b>	<b>9</b>
2.1. Requirements of Approval .....	9
<b>3. Heavy Vehicle Risk Assessment .....</b>	<b>11</b>
3.1. Uncontrolled Release Management .....	11
<b>4. Heavy Vehicle Salvage Management.....</b>	<b>12</b>
4.1. Heavy Vehicle Breakdown.....	12
4.2. Public Road Network Heavy Vehicle Salvage .....	13
4.3. Heavy Vehicle Salvage .....	13
4.4. Responsibilities .....	14
<b>5. Compliance Management.....</b>	<b>15</b>
5.1. Training.....	15
5.2. Inspection, Testing and Auditing .....	15
5.3. Reporting .....	16
5.4. Procurement .....	16
5.5. Communications .....	16

## Figures

Figure 1-1 Heavy Vehicle Route .....	7
--------------------------------------	---

## Tables

Table 2-1 Compliance Obligations .....	9
Table 2-2 Reporting Obligations .....	10
Table 4-1 Primary Contacts .....	14

## Appendix

### Appendix A: Risk Register for Heavy Vehicle Salvage



## Snowy 2.0 TCP Heavy Vehicle Salvage Plan

### Definitions

Term	Definition
Aboriginal Object	Any deposit, object, or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains
Compliance audit	Verification of how implementation is proceeding with respect to a Construction Environmental Management Plan (CEMP) (which incorporates the relevant approval conditions).
Contractor or Principal Contractor	Stage 1 of the scope of works for design and construction the Contractor or Principal Contractor is UGL Pty Ltd Stage 2 of the scope of works for design and construction the Contractor or Principal Contractor is UGL/CPB Joint Venture. Any reference to the 'Contractor' relates to the activities of both appointed Contractors (UGL and UGL/CPB Joint Venture), but only as is relevant to the appointed stage of works.
Environmental aspect	Defined by AS/NZS ISO 14001:2015 as an element of an organisation's activities, products or services that can interact with the environment.
Environmental impact	Defined by AS/NZS ISO 14001:2015 as any change to the environment, whether adverse or beneficial, wholly, or partially resulting from an organisation's environmental aspects.
Environmental incident	An unexpected event that has, or has the potential to, cause harm to the environment and requires some action to minimise the impact or restore the environment.
Environmental objective	Defined by AS/NZS ISO 14001:2015 as an overall environmental goal, consistent with the environmental policy, that an organisation sets itself to achieve.
Environmental policy	Statement by an organisation of its intention and principles for environmental performance.
Environmental target	Defined by AS/NZS ISO 14001:2015 as a detailed performance requirement, applicable to the organisation or parts thereof, that arises from the environmental objectives and that needs to be set and met in order to achieve those objectives.
Environmental Representative	A suitably qualified and experienced person independent of Snowy 2.0 Transmission Line Project design and construction personnel employed for the duration of construction. The principal point of advice in relation to all questions and complaints concerning environmental performance.
Snowy 2.0 Transmission Line Approvals	Snowy 2.0 Transmission Line approvals include: Snowy 2.0 Transmission Line Infrastructure Approval NSW SSI 9717 Snowy 2.0 Transmission Line EPBC Approval Cth EPBC 2018/8363
Non-compliance	Failure to comply with the requirements of the HumeLink Approvals or any

Snowy 2.0 TCP  
Heavy Vehicle Salvage Plan

Term	Definition
	applicable licence, permit or legal requirements.
Non-conformance	Failure to conform to the requirements of HLW system documentation including this CEMP or supporting documentation.
Planning Approval Documentation	The NSW planning approval documents, as they relate to the Snowy 2.0 Transmission Line and as listed in CoA A2 of the NSW Infrastructure Approval for HumeLink (SSI 9717)
Principal, the	Transgrid
Synergy	UGL-CMS incident management software program to manage, report, record and take action on emergency and incidents.

Snowy 2.0 TCP  
Heavy Vehicle Salvage Plan

## Acronyms and Abbreviations

Term	Definition
<b>CEMP</b>	Construction Environmental Management Plan
<b>COA</b>	Conditions of Approval
<b>CSSI</b>	Critical State Significant Infrastructure
<b>DPE</b>	Department of Planning and Environment
<b>DPI</b>	Department of Primary Industries
<b>EPA</b>	Environment Protection Authority
<b>EPL</b>	Environmental Protection License
<b>ERP</b>	Emergency Response Plan
<b>EMS</b>	Environmental Management System
<b>FCNSW</b>	Forestry Corporation NSW
<b>FRNSW</b>	Fire and Rescue NSW
<b>HSSE</b>	Health, Safety, Security and Environment
<b>KM</b>	Kilometers
<b>KNP</b>	Kosciuszko National Park
<b>KV</b>	Kilovolts
<b>MTCP</b>	Marine Traffic Control Plans
<b>MW</b>	Megawatt
<b>MWH</b>	Megawatt hours
<b>NEM</b>	National Electricity Market
<b>NPWS</b>	National Parks and Wildlife Service
<b>NSW</b>	New South Wales
<b>PC</b>	Principal Contractor as defined.
<b>RFS</b>	Rural Fire Service
<b>SHL</b>	Snowy Hydro Limited
<b>TfNSW</b>	Transport for New South Wales
<b>UGL</b>	UGL Engineering Pty Ltd
<b>WHS</b>	Work Health and Safety
<b>FGJV</b>	Future Generation Joint Venture

## 1. Introduction

### 1.1. Background

In 2020, Snowy Hydro Limited (SHL) obtained approval to expand the existing Snowy Mountains Hydro-electric Scheme (Snowy Scheme) by linking the existing Tantangara and Talbingo reservoirs through a series of underground tunnels and constructing a new underground hydro-electric power station (Snowy 2.0). Snowy 2.0 is expected to increase the generation capacity of the Snowy Scheme by almost 50 percent, providing an additional 2000 megawatts (MW) of generating capacity, and making approximately 350,000 megawatt hours (MWh) of large-scale storage available to the National Electricity Market (NEM).

To connect Snowy 2.0 to the NEM, a new transmission connection is required. NSW Electricity Networks Operations Pty Ltd as a trustee for NSW Electricity Operations Trust (known as Transgrid) received development approval on 14 September 2022 under Part 5 Division 5.2 of the NSW Environmental Planning and Assessment Act 1979 (EP&A Act) for the construction and operation of the Snowy 2.0 Transmission Connection Project (the Project) to enable the grid connection of Snowy 2.0 to the NEM. The Project has been declared Critical State Significant Infrastructure (CSSI) under the New South Wales (NSW) State Environmental Planning Policy (State and Regional Development) 2011 a part of the CSSI declaration for the Snowy 2.0 and Transmission Project in Clause 9, Schedule 5.

### 1.2. Purpose

The purpose of this SITMP is to describe how the Project vehicles will interact with the road authority/manager and the public to control the movement of Project personnel, plant, light vehicles in extreme weather conditions including inclement weather, especially snow and ice. The plan is developed in line with the UGL's Safety Management System and will be implemented and managed across the project to prevent harm to the environment, project staff, subcontractors, and the public.

### 1.3. Scope

The Scope of Works is for the design and construction of Maragle 500kV Substation including the 330kV Switching Yard (Maragle Substation) and 330kV Transmission Line Connections.

- Design and construction of Maragle Substation and supporting works.
- Design and construction of two 330kV transmission lines, cut into Line 64, the installation of Optical Fibre Ground Wire (OPGW) on a section of Line 64, and supporting works.
- 

Figure 1-1 Heavy Vehicle Route



## Snowy 2.0 TCP Heavy Vehicle Salvage Plan

### Heavy vehicle Route - Over-Dimensional and Heavy Vehicle Access Route Restrictions

Note - Switch Yard and Western Transmission Line traffic will access via Elliott Way, Lobs Hole traffic via Link Rd. These routes are also available to LV's.



## Snowy 2.0 TCP Heavy Vehicle Salvage Plan

## 2. Objectives

The key objective of the HVSP is to ensure that any potential heavy vehicle recovery and salvage are minimised and within the scope permitted by the conditions of Approval.

To achieve this, the Principal Contractors (PC) will:

- Ensure that appropriate measures are implemented to avoid or minimise the impact of project related heavy vehicle salvage, including safety related impacts;
- Ensure appropriate measures are implemented to comply with all relevant requirements;
- Provide appropriate training and resources to logistics and heavy vehicle drivers regarding breakdown and salvage protocols; and
- Make available information and resources that provides an environment that supports UGL contractor's compliance with all relevant legislation and other Project requirements.

### 2.1. Requirements of Approval

The PC will comply with the requirements of the conditions of approval and the conditions relevant to heavy vehicle salvage management presented in Table 2-1 below. This document is subordinate to the Project Traffic and Transport Management Plan.

Table 2-1 Compliance Obligations

Reference No	Requirement	Document Reference
B32	<p>Prior to commencing construction or road upgrades identified in condition B27 (whichever comes first), the Proponent must prepare a Traffic Management Plan for the development in consultation with FCNSW, NPWS, TfNSW, Snowy Valleys Council, Snowy Monaro Regional Council and NSW Police, and to the satisfaction of the Planning Secretary. This plan must include:</p> <p>(d) details of the measures that would be implemented to:</p> <p>(i) minimise traffic safety impacts of the development and disruptions to local road users during construction, upgrading or decommissioning works, including: responding to any emergency repair or maintenance requirements.</p> <p>(g) include a detailed:</p> <p>(i) Heavy Vehicle Salvage Plan;</p>	This plan
B45	<p>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.</p>	Section 3.1 Uncontrolled Release Management

Snowy 2.0 TCP  
Heavy Vehicle Salvage Plan

Table 2-2 Reporting Obligations

Condition	Report Notification	Timing	Purpose
C7	Notification of incident	Immediately upon becoming aware of the incident	Information
C8 – C9	Notification of non-compliance	Within seven days upon becoming aware of any non-conformance. Note: a non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.	Information

### 3. Heavy Vehicle Risk Assessment

The PC's have taken the decision to reduce to essential only heavy vehicle operations from 1st June through to 31st August for each year of the Project. Monitoring of weather conditions and consultation with the relevant roads authority will dictate the usage of heavy vehicles, recommencement of major works will be assessed on an ongoing basis to ensure maximisation of available works program is balanced by the risk exposure of the PC.

Reduction in the use of heavy vehicles and monitoring of weather conditions during the winter months will minimise the risk of heavy vehicle accidents due to slippery road conditions that have the potential to affect the availability of the road network and the direct impact on other road users. However, it is acknowledged that snow and ice can occur outside these months, weather and road conditions will be assessed and planning all vehicle movements will occur (HV and LV) around the shoulders of snow season.

An initial risk review has considered salvage operations are likely to apply to two distinct scenario's:

- Heavy vehicle accident (single or multiple vehicle); and
- Heavy vehicle breakdown (mechanical / engine);

#### 3.1. Uncontrolled Release Management

The uncontrolled release of fluids from a heavy vehicle has a direct and harmful effect on the environment, particularly in sensitive alpine regions. In the event of a mechanical failure or incident/accident, all the PC contracted heavy vehicles will carry appropriately sized spill management kits that are readily available, and the driver has been trained in the use and application of the kit to manage the uncontrolled release.

As a minimum the spill management protocol must address the following points:

- Attend to the release immediately;
- Where reasonably practicable, recover fuels and oils from damaged tanks under supervision of Site Environmental Advisor;
- If recovery of fuels and oils is not practicable and it is safe to do so, stop the spill at the source;
- For fuels and hydraulic spills notify the NSW Fire & Rescue (000) and your Supervisor;
- Contain the spill, use absorbent material around and over the spill;
- Ensure that all materials used in the clean-up are disposed of at a legal facility;
- Reference Contaminated Land Management Plan for regulated waste disposal as approved by EPA;
- Log the incident; and
- Notify Client (Transgrid) of EPA incident who will notify the EPA (131555), DPE and NPWS (as applicable).

## 4. Heavy Vehicle Salvage Management

The PC will deliver appropriate driver training, specific to the Project, considering alpine conditions and that the potential for adverse weather is communicated in driver inductions, toolbox discussions and team briefs in addition to the relevant procurement processes.

Preventative measures addressed in driver education include the following:

- Speed reductions;
- Best practice vehicle maintenance (tyres, lighting etc.);
- Adherence to legal requirements for snow chains;
- Use of fog lights during periods of low visibility;
- Cessation of works;
- Grading and de-icing (by others) for snow removal;
- Advising suppliers of potential adverse weather and likely site shutdowns;
- Passing protocols and blind spots;
- Transport communication strategies including regular call-in requirements;
- Convoy notifications, escorts, and traffic control;
- Keeping to stable ground;
- Spotters when reversing and camera checks;
- Maintaining rear travel distances; and
- vehicle and plant prechecks etc.

### 4.1. Heavy Vehicle Breakdown

UGL will engage as part of a procurement process, an on-call heavy vehicle roadside vehicle breakdown service for the period of the project.

The service as a minimum will:

- Deliver roadside assistance to Project heavy vehicle breakdowns on a 24/7 basis across the project timeline;
- Ensure all roadside vehicle breakdown locations are visible to the public (hazard lights, witches hats);
- The on-call workshop service trucks will, as a minimum require amber-flashing beacons mounted atop of the service vehicle, operable hazard lights and area lighting; and
- Sufficient reflective bollards to ensure a safe working environment during repairs.

In the event of a breakdown without incident/accident, Project heavy vehicle drivers will undertake the following in order to ensure the safety of the on-call mechanic, the public road users and all Project personnel:

- Contact the Project Safety Manager (PSM) (PSM to facilitate mechanic response and notice of incident to the Client);
- Driver to establish a safe advance-warning zone for breakdown (hazard lights, witches hats);
- Project Safety Manager to notify salvage contractor for potential tow service;
- Driver to notify PSM when incident has cleared;

## Snowy 2.0 TCP Heavy Vehicle Salvage Plan

- PSM to notify the Client of de-escalation of breakdown event; and
- Transgrid will notify the road authority/manager to initiate public notification or other measures as required.

### 4.2. Public Road Network Heavy Vehicle Salvage

In the event of an accident, involving a Project heavy vehicle on a public road requiring recovery or salvage, the Police, Ambulance (if required) and relevant road agency/authority (for that road section) will be notified by the Client with information provided by the PC PSM. Police attendance will be as the primary responder managing the accident scene for first response and or investigation. Consultation with NSW Police will consider if WorkSafe NSW notification is also required.

The PC will also notify the Client immediately after notifying emergency services to ensure open and transparent communications and supports notification to project Principal.

The PC will notify our heavy vehicle salvage contractor and traffic management provider to understand the indicative response time for arrival to site. The salvage operation will be coordinated through the emergency services agencies.

### 4.3. Heavy Vehicle Salvage

Where the PC's heavy vehicle has sustained a mechanical failure that is not repairable by roadside assistance, the same notification process as described in Section 4.2 (above) will be implemented. A salvage recovery plan and process will be developed onsite by our heavy vehicle salvage contractor.

When a heavy vehicle requires repair/salvage on tower access tracks, particularly on the steep incline of Sheep Station Ridge (towers 8-11) and adjacent to Elliott Way (towers 12-13) the terrain and location of the heavy vehicle will be communicated at the time of recovery/repair request to the company concerned.

In remote access tracks and Snowy Hydro private or closed roads, the PC's Client will provide appropriate notification to Future Generation and considerations will be made relevant to the size scope and complexity of the recovery. This will facilitate a combined response to any salvage operation in remote of closed areas.

As part of the tender for salvage and breakdown service, each successful tenderer will provide a three-year retrospective safety statistic performance in addition to appropriate work method statements. A review of risk assessment and mitigative methodology will also be undertaken. A heavy vehicle salvage operator will have at least UOC TLIC0011- Conduct heavy vehicle recovery operations and will have been deemed competent in:

1. Prepare for recovery operations;
2. Travel to recovery site;
3. Assess recovery site and winching requirements;
4. Hook-up disabled vehicle;
5. Tow disabled vehicle to delivery point;
6. Unhook disabled vehicle; and
7. Finalise recovery operations.

Through consultation with service providers and the PC's data analysis of heavy vehicle events the following high-risk areas have been identified and the key priority areas include:

- Prestart risk assessment;

## Snowy 2.0 TCP Heavy Vehicle Salvage Plan

- At risk workers;
- Musculoskeletal disorders;
- Working at heights;
- Mental and physical health;
- Traffic management; and
- Ancillary (non-driving) tasks.

### 4.4. Responsibilities

The PC's primary contacts, in the event of heavy vehicle breakdown, tow or salvage protocol will be to notify the PC's client (TransGrid) to undertake the statutory and project notifications (FCNSW, NPWS, visitors), with the PC being responsible for alerting Emergency Services, implementing local traffic control methods, and arranging breakdown services by alerting the salvage operator.

Table 4-1 Primary Contacts

Organisation / Agency	Contact Details
Transport for New South Wales	13 22 13
NSW National Parks and Wildlife Service	0419 400 550, After Hours 1800 629 104
Client (TransGrid)	PM Andrew Buttigieg 0429 676 165 (Stage 1) PD Jeremy Roberts 0408 950 387 (Stage 2)
Transport Management Centre	131 700
Environmental Protection Agency (EPA)	131 555
WorkSafe NSW	131 050
Emergency Services: Fire and Rescue NSW NSW Police NSW Ambulance	000 or 112
Traffic Control Contractor	TRAFX – Khancoban mb: 0427763244
Salvage Towing Contractor	Wagga Wagga Truck Towing - mb: 0419 693 369
Heavy Vehicle Breakdown Mechanic	Davidson's Heavy Vehicle Repairs Wagga Wagga 0401 194 338

As the Emergency Plan is the preferred process handling incidents including those involving Heavy Vehicles, you are encouraged to refer to the Emergency Plan for the most up-to-date Organisation / Agency and Contact Details.



## 5. Compliance Management

### 5.1. Training

Induction training is undertaken for all PC personnel and sub contractors engaged on the Snowy 2.0 - Project and addresses the specific elements related to heavy vehicle salvage and recovery including:

- Vehicle routes to and from site;
- Insight into the local road network, including peak traffic periods and activities;
- Driver behaviour and the conduct for heavy vehicles including permitted parking and lay-up areas; and
- Procedures to be implemented in the event of an incident (e.g. traffic accidents or breakdown) and where vehicles require salvage or recovery.

Types of road conditions, users likely to be encountered at various times of the year and along which routes.

Specific training and situational awareness will be delivered via Team Briefs (weekly) and Toolbox Talks (daily) that manages and provides insight into the daily works schedule, heavy vehicle movements, fatigue and feedback from the previous days shift.

Typical areas of knowledge for operations personnel include but are not limited to those listed below:

- Vehicle movement plans – approved heavy vehicle haulage routes, safe entry and exit and other access restrictions;
- Delivery driver's induction that includes safe protocols to be followed when travelling on internal and external roads. The briefing will reinforce posted speed limits, advisory speeds, and historic high accident points on winding sections of road;
- Communication of traffic incidents to the Client, road authorities and emergency services;
- Vehicle operations pre-checks;
- Driving in snow and icy conditions; and
- Driver fatigue awareness training.

Additional training requirements covered during PC induction for personnel on the Snowy 2.0 - Maragle Substation and 330kV Transmission Line Connections addresses the following:

- Induction training to include snow & ice content;
- Black spot incident locations etc;
- Scheduled seasonal awareness training for snow & ice;
- VOC for plant; and
- Task Specific Training – such as snow chain fitting when required seasonally.

### 5.2. Inspection, Testing and Auditing

The PC will develop desktop scenarios that address a number of heavy vehicle salvage and recovery situations as applicable to the exposure across the Maragle substation and 330kV transmission line connections project.

The desktop scenarios will be workshopped with the Local Emergency Management Committee



## Snowy 2.0 TCP Heavy Vehicle Salvage Plan

(LEMC) as soon as practicable after possession of site, if not possible beforehand. Validation of the scenarios to be assessed by all relevant stakeholders, including NSW Police, NPWS, TfNSW, LEMC and Councils. Where testing identifies any opportunities for process improvement, the PC will work collaboratively with TTLG to resolve the issues.

The HVSP will form part of the PC audit and inspections regime as part of UGL systems certification program and will be reviewed and audited periodically, at premobilisation, post mobilisation and quarterly thereafter. It will audit and inspect such items including but not limited to;

- Vehicle pre-check – Heater, wipers, lights, tires, breaks, 4WD, de-icing, battery, alpine fuel, radiator fluid;
- Load checking (especially for HRs) – Straps & tension, dunnage, excess snow, trailer lights, brakes etc; and
- Journey Management Plan and prechecks – Weather forecast, black ice risk, coms protocols, road closure.

### 5.3. Reporting

As outlined in Section 4 of this document all heavy vehicle incidents, breakdowns and accidents have a well-defined process of notification and escalation of scenarios by severity. In all situations the PC will notify the Client in a timely manner of all heavy vehicle events to ensure open and transparent communications that facilitates upward reporting. The effectiveness of the HVSMP will be managed by the selection process of HV transport companies, training, inspection, auditing, hazard reporting, incident reporting data, non-compliance reporting, closeout effectiveness as monitored in Synergy.

### 5.4. Procurement

The PC will procure a roadside heavy vehicle rescue provider on a 24/7 basis and a heavy vehicle salvage operator for all Project vehicles on the Snowy 2.0 project. As part of the procurement process the contracted service provider must provide all insurances as part of the submission to ensure adequate coverage of liabilities for the service delivery. In support of the contractor submission a statement of capability and validation of competency for employees servicing the contract will be required.

The heavy vehicle salvage procedures will address the actions to be undertaken, responsibility of individuals, communication protocols and safety obligations in response to heavy vehicle incidents. A copy of the selected salvage contractors procedures addressing the aforementioned tasks, will be appended to updates of this TTMP/HVSMP.

The PC roadside rescue and salvage strategy will include:

- Procedures in the event of a heavy vehicle breakdown;
- Procedures in the event of a heavy vehicle accident;
- Communication channels between drivers, management, road authorities and The Client; and
- Organisation of a heavy vehicle salvage and breakdown response mechanic.

### 5.5. Communications

Communications protocols during an incident – Each project vehicle will be fitted with a UHF two-way radio. Immediate hazard reporting on Channel 40, to warn the general public and commercial road users. Where safe to do so, the driver of the heavy vehicle (if not incapacitated) will be

Snowy 2.0 TCP  
Heavy Vehicle Salvage Plan

expected to warn other road users by non-radio means as well, until further assistance arrives on the scene. Project vehicle operators involved in an incident will follow the communication requirements detailed in the Emergency Plan relating to vehicle incidents, to ensure key project staff are alerted and appropriate emergency services / road authority / managers and stakeholders, are correctly notified.

Snowy 2.0 TCP  
Heavy Vehicle Salvage Plan**Appendix A. Risk Register for Heavy Vehicle Salvage**

Activity	Hazard	Risks	Initial Risk Rating	Controls	Revised Risk Rating
Heavy Vehicle Salvage	Accessing incident site	Bogged tow truck. Wild animals Heavy vehicle accident	High	Ground assessed before accessing  Speed limits and awareness  Drive to road conditions	Moderate
	Attaching tow/axle lift	Manual handling injury Cuts/scrapes/bruises	Moderate	Two person lifts Correct manual handling techniques  Gloves for task	Low
	Lift/tow	Lift failure Tow strap/chain failure	High	Inspection of equipment and maintenance  Chains and straps inspected and tagged as tested  Personnel out of line of fire	Moderate
	Egress from incident site	Bogged tow truck. Wild animals Heavy vehicle accident Loss of load (recovered vehicle)	High	Ground assessed before accessing  Speed limits and awareness  Drive to road conditions Driver chain of responsibility, check load securing	Moderate

## **APPENDIX F : Marine Transport Management Plan**

## APPENDIX F MARINE TRANSPORT MANAGEMENT PLAN

# UTILITIES TRANSMISSION LINE TTMP - MARINE TRANSPORT MANAGEMENT PLAN

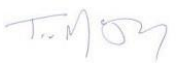
Maragle 330kV Switching Station and 330kV Transmission Line  
Connections

**Document number:** 3200-0645-PLN-023-TMP-MTMP

**Revision date:** 05/09/2023

**Revision:** 0.04

## Plan Approval

Rev.	Approval	Name	Position	Organisation	Signature	Date
0.04	Approved By	Tim McCarthy	Project Manager	UGL		05/09/23
0.04	Endorsed By	Andrew Buttigieg	Senior PM (Delivery)	Transgrid		

## Document Revision History

Rev.	Date	Prepared By	Reviewed By	Approved By	Remarks
0.02	04/11/2022	Geoff Fletcher	Ian Rembridge	Trevor Noble	Initial issue of combined TTMP
0.03	15/05/2023	Ian Rembridge	Darrell Van Bruchem	Trevor Noble	Revised Transgrid Comments
0.04	05/09/2023	Ian Rembridge	Darrell Van Bruchem	Tim McCarthy	Revised Transgrid and NPWS Comments

*This plan has been developed by UGL to define the management objectives and practices that are to be implemented during the execution of Contract activities. It is the private property of UGL and without their consent must not be shown or given to any competitor or third parties or used by the recipient for purposes other than those for which they are issued. Any printed documents shall be considered as uncontrolled.*

## TABLE OF CONTENTS

<b>1. Introduction .....</b>	<b>4</b>
1.1 1.1 Background.....	4
1.2 Purpose.....	4
1.3 Scope.....	4
<b>2. Objectives .....</b>	<b>5</b>
2.1 Requirements of approval .....	6
2.2 Reference Documents & Legislation .....	7
<b>3. Licences &amp; Permits .....</b>	<b>7</b>
3.1 Guidelines & Standards .....	7
<b>4. Environmental Considerations.....</b>	<b>8</b>
4.1 Talbingo Reservoir & Recreational Facilities .....	8
<b>5. Construction Operating Protocols for the Reservoir .....</b>	<b>8</b>
<b>6. Reporting .....</b>	<b>8</b>
<b>7. Marine Works Area.....</b>	<b>9</b>
7.1 Talbingo Reservoir.....	9
<b>8. Hours of Operation.....</b>	<b>10</b>
<b>9. Marine Traffic Control Plans.....</b>	<b>10</b>
<b>10. Inspections &amp; Audits.....</b>	<b>10</b>
<b>11. Training .....</b>	<b>10</b>
<b>12. Safety .....</b>	<b>10</b>
12.1 Navigational Aids, Markers & Exclusion Zones .....	11
12.2 Refuelling.....	11
12.3 Chemicals & Dangerous Goods Storage .....	12
<b>13. Vessel Specifications.....</b>	<b>12</b>
<b>14. Traffic Management Plan .....</b>	<b>12</b>
14.1 Noise & Vibration Management.....	12
<b>15. Communication with Stakeholders.....</b>	<b>12</b>
<b>16. Emergency Management .....</b>	<b>13</b>
<b>Appendix A MARINE TMP (TALBINGO RESERVOIR BOAT ROUTE).....</b>	<b>14</b>
<b>Appendix B VESSEL SPECIFICATIONS.....</b>	<b>14</b>
<b>Appendix C EXCLUSION AND DROP ZONE DELINEATION .....</b>	<b>15</b>
<b>Appendix D CONDUCTOR STRINGING WMS – DUAL CIRCUIT 330kV .....</b>	<b>15</b>
<b>Appendix E TfNSW NAVIGATION WARNING TALBINGO RESERVOIR .....</b>	<b>16</b>

## ACRONYMS AND ABBREVIATIONS

Term	Definition
<b>CEMP</b>	Construction Environmental Management Plan
<b>COA</b>	Conditions of Approval
<b>CSSI</b>	Critical State Significant Infrastructure
<b>DPE</b>	Department of Planning and Environment
<b>DPI</b>	Department of Primary Industries
<b>EPA</b>	Environment Protection Authority
<b>EPL</b>	Environmental Protection License
<b>ERP</b>	Emergency Response Plan
<b>EMS</b>	Environmental Management System
<b>FCNSW</b>	Forestry Corporation NSW
<b>FRNSW</b>	Fire and Rescue NSW
<b>HSSE</b>	Health, Safety, Security and Environment
<b>KM</b>	Kilometres
<b>KNP</b>	Kosciuszko National Park
<b>KV</b>	Kilovolts
<b>MTCP</b>	Marine Traffic Control Plans
<b>MW</b>	Megawatt
<b>MWH</b>	Megawatt hours
<b>NEM</b>	National Electricity Market
<b>NPWS</b>	National Parks and Wildlife Service
<b>NSW</b>	New South Wales
<b>RFS</b>	Rural Fire Service
<b>SHL</b>	Snowy Hydro Limited
<b>TfNSW</b>	Transport for New South Wales
<b>UGL</b>	UGL Engineering Pty Ltd
<b>WHS</b>	Work Health and Safety
<b>FGJV</b>	Future Generation Joint Venture



# 1. INTRODUCTION

## 1.1 BACKGROUND

In 2020, Snowy Hydro Limited (SHL) obtained approval to expand the existing Snowy Mountains Hydro-electric Scheme (Snowy Scheme) by linking the existing Tantangara and Talbingo reservoirs through a series of underground tunnels and constructing a new underground hydro-electric power station (Snowy 2.0). Snowy 2.0 is expected to increase the generation capacity of the Snowy Scheme by almost 50 percent, providing an additional 2000 megawatts (MW) of generating capacity, and making approximately 350,000 megawatt hours (MWh) of large-scale storage available to the National Electricity Market (NEM).

To connect Snowy 2.0 to the NEM, a new transmission connection is required. NSW Electricity Networks Operations Pty Ltd as a trustee for NSW Electricity Operations Trust (known as Transgrid) received development approval on 14 September 2022 under Part 5 Division 5.2 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act) for the construction and operation of the Snowy 2.0 Transmission Connection Project (the Project) to enable the grid connection of Snowy 2.0 to the NEM. The Project has been declared Critical State Significant Infrastructure (CSSI) under the New South Wales (NSW) State Environmental Planning Policy (State and Regional Development) 2011 a part of the CSSI declaration for the Snowy 2.0 and Transmission Project in Clause 9, Schedule 5.

Transgrid (the Proponent) has engaged UGL Projects Division (UGL) as the Principal Contractor to construct the Maragle 330kV Switching Station and 330kV Transmission Line Connection Project as part of the broader Snowy 2.0 Project.

## 1.2 PURPOSE

The purpose of this plan is to manage marine traffic risks associated with construction works for the Maragle 330kV Switching Station and 330kV Transmission Line Connections Project as part of the Snowy Hydro 2.0 upgrade.

This Marine Transport Management Plan (MTMP) sets out requirements for the management of waterway traffic associated with the Maragle Project scope of works in order to optimise safe movement of works vessels and recreational craft.

This plan is based on the requirements as set in Australian Standard 1742.3-2019 and Roads and Maritime Supplement document will be used to provide authorisation of all actions in relation to water traffic management. This document and subsequent iterations will be made available to the client for the purposes of reviewing and auditing. It also addresses all Conditions of Approval.

The aim of this MTMP is to notify the Regulatory Authorities, The Principal, UGL project staff, subcontractors, site personnel and the local public of changes to marine traffic conditions and to guard against operations which may pose a hazard to Marine Works Areas (MWA).

This MTMP will be used to ensure a safe interface between construction vessels and other waterway users during;

- Construction works for the Maragle Project;
- Delivery of plant and equipment;
- Transporting UGL staff and subcontractors to site; and
- Safe navigation of Talbingo Reservoir for workgroups and recreational boating.

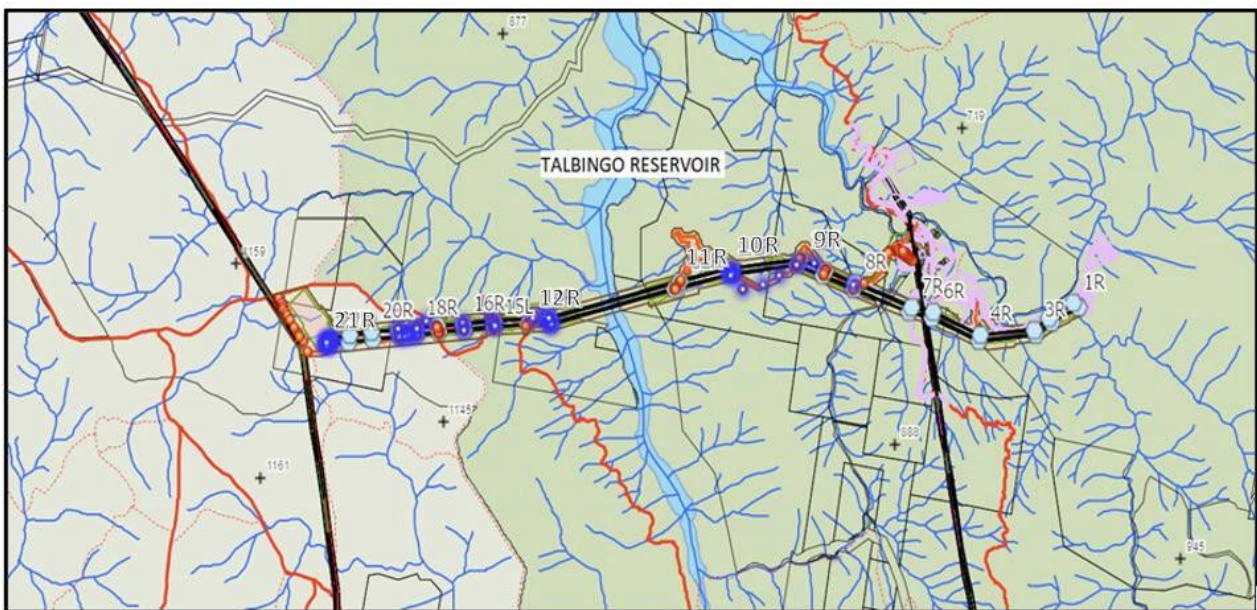
## 1.3 SCOPE

The Scope of Works for Specification and Contract No. 1611 (Specification and Contract) is specific to the design and construction of Maragle 330kV Switching Station and 330kV Transmission Line Connections.

- Design and construction of Maragle 330kV Switching Station and supporting works; and
- Design and construction of two 330kV transmission lines, cut into Line 64, the installation of OPGW on a section of Line 64, and supporting works.



**Figure 1 Talbingo Reservoir Conductor Crossing**



**Figure 2 Location of Water Crossing for Stringing Activity**

## 2. OBJECTIVES

The Marine Transport Management Plan addresses the following items as required for Principal Contractors to comply with the Deed and Traffic Management Plan:

- Interface with marine traffic in Talbingo Reservoir; and
- Liaison with key Stake Holders and the Public, National Parks and Wildlife Service, Forestry Corporation NSW, Snowy Valleys Council, Snowy Hydro

A copy of this Marine Transport Management Plan (MTMP) shall be kept on site and will be reviewed monthly or at a more frequent period as required by a change to the project conditions.

The effectiveness of the plan will be evaluated via project audits.

The MTMP also covers details of the Project Scope and will fulfill the following minimum requirements:

- Consultation and compliance with the Principals requirements as set out in the conditions of the Marine Transport Management Plan Approval;
- Environmental protection and security measures;
- Program requirements;
- Procedures to be used for moving construction vessels during normal operations and inclement weather;
- As constructed information and other records;
- The provision to the Principal Representative of details of marine works methods and planned resource levels;
- Minimisation of disruption to construction vessels operations and recreational craft;
- Management of recreational boating; and
- Communication with the Principal and Public around limitations of usage for nominated areas on Talbingo Reservoir.

## 2.1 REQUIREMENTS OF APPROVAL

Approvals and reporting obligations identified below have been considered and integrated into the Marine Transport Management Plan. Compliance and project reporting will support the actionable line items identified below in the Table 1 and reporting obligations in Table 2.

**Table 1 Compliance Obligations**

Reference No	Requirement	Document Reference
B30	(c) restrict development-related vessel speeds on Talbingo Reservoir to current TfNSW speed limits.	Appendix E Section 9 Marine Traffic Control Plans
B32.	Prior to commencing construction or road upgrades identified in condition B27 (whichever comes first), the Proponent must prepare a Traffic Management Plan for the development in consultation with FCNSW, NPWS, TfNSW, Snowy Valleys Council, Snowy Monaro Regional Council and NSW Police, and to the satisfaction of the Planning Secretary. This plan must include:	TTMP
	(a) details of the transport route to be used for all development-related traffic;	Appendix A
	<ul style="list-style-type: none"> <li>procedures for stringing cables and transmission lines across roads and Talbingo Reservoir;</li> </ul>	Appendix D Methodology TBA
	<ul style="list-style-type: none"> <li>minimising impacts to the public using Talbingo Reservoir and any water related infrastructure such as the O'Hares campground boat ramp;</li> </ul>	Section 7.1 Talbingo Reservoir
	(f) ensure any vessel or structure occupying waters must display appropriate shapes and lights in accordance with the Marine Safety (Domestic Commercial Vessel) National Law 2012; (iii) Marine Transport Management Plan; (v) Communication Strategy to keep the public informed about the impacts of the development;	MTMP Section 15
B39	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.	Section 12.2 Refuelling  Section 12.3 Chemicals and Dangerous Goods Storage

**Table 2 Reporting Obligations**

Condition	Report Notification	Timing	Purpose
C7	Notification of incident	Immediately upon becoming aware of the incident	Information
C8 – C9	Notification of non-compliance	Within seven days upon becoming aware of any non-conformance. Note: a non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.	Information

## 2.2 REFERENCE DOCUMENTS & LEGISLATION

The primary reference document for this plan, is the conditions set out in the Transport Management Plan Approval for this project. Works under Construction (WUC) are to adhere to the Principal Contractor's Project Manager and where Marine activities are to be undertaken, the Waterways Controller, in addition to the following legislation:

NSW Legislation:

- *Marine Pollution Act 2012*;
- *Marine Pollution Regulation 2014* (NSW);
- *Marine Safety Act 1998*;
- *Marine Safety Regulation 2016* (NSW);
- *Work Health and Safety Act 2011* (NSW); and
- *Work Health and Safety Regulation 2011* (NSW).

Commonwealth Legislation:

- *Shipping Registration Act 1981*;
- *Navigation Act 2012* and *Marine Order 64*;
- *Maritime Safety (Domestic Commercial Vessel) National Law Act 2012*; and
- *Marine Safety (Domestic Commercial Vessel) National Law Regulation 2013*.

## 3. LICENCES & PERMITS

An aquatic licence will be obtained from TfNSW for in-reservoir construction activities and exclusion zones in accordance with Section 12 and 18 of the *Marine Safety Act 1998*. Appropriate notifications of exclusive use areas and waterway restrictions will be made including statutory Marine Notices published in the NSW Government Gazette. Enquiries will also be made as to other media that may be appropriate or assist in the dissemination of notifications or advice to commercial / public users of upcoming waterway restrictions associated with the project.

### 3.1 GUIDELINES & STANDARDS

The guidelines also considered in the completion of this Marine Transport Management Plan include:

- Safety Management System (SMS) Guidelines – Commercial Vessels (RMS); and
- Guidelines for a Safety Management System (Australian Maritime Safety Authority, 2018)



## 4. ENVIRONMENTAL CONSIDERATIONS

### 4.1 TALBINGO RESERVOIR & RECREATIONAL FACILITIES

Talbingo Reservoir is approximately 5km south of the township of Talbingo. The reservoir has a mixed usage. Public access to the reservoir for boats is from a concrete boat ramp on the eastern side of the dam wall. The reservoir is also accessible from points within KNP including Lobs Hole Ravine campground and O'Hare's Camping and Rest Area. Access to Lobs Hole Ravine Campground is closed as part of the Snowy Hydro project. Picnic tables and toilets are provided at both the boat ramp and the spillway.

Vessel counts and movement surveys undertaken between March and April 2018, reviewed as part of the Excavated Rock Placement - Navigation Impact Assessment for Talbingo Reservoir (RHDHV, 2019) indicate a peak daily demand of 75 vessels per day using the boat ramp and a typical daily demand of less than 10 vessels.

## 5. CONSTRUCTION OPERATING PROTOCOLS FOR THE RESERVOIR

The UGL Waterway Controller is:

- Name: Darrell Van Bruchem
- Mobile: 0447 307 244.

The Waterway Controller is to review and approve or reject the Marine Transport Management Plan (MTMP). Communications with the Waterway Controller is absolutely critical to the ongoing safety and efficient movement of vessels within the Marine Works Areas (MWA).

UGL Contractors operate across both land and water and coordination of all construction staff associated with the stringing of conductors over the Talbingo Reservoir will be an ongoing process for the duration of aerial works. All waterway movements must be planned and communicated with the Waterway Controller to ensure vessel movements and interaction with pleasure craft is coordinated and timely.

The 24hr contact for the project for shall be:

- UGL Project Manager – Trevor Noble Mob 0413 027 480
- UGL Site Safety Manager – Ian Rembridge Mob 0466 517 794
- Waterway Controller – Darrell Van Bruchem Mob 0447 307 244

The Waterway Controller directs all construction vessel movements as required to participate in the Marine Works Area (MWA). All construction vessels for this project shall seek clearance to move from the Waterway Controller, 15minutes before moving from berths within the MWA area.

All vessel movements will be coordinated with the aerial stringing activities, with no movement of vessels permitted into the exclusion zone or under the fall zone of the stringing activity.

No vessel movements will be approved under the drop zone if the stringing operation is under tension via winches or is static without being terminated in permanent conductor clamps.

## 6. REPORTING

The Principal Contractor will report to the Client and other agencies as required any maritime traffic management issues related to the project. Notifications will include maritime incidents that adversely impact maritime traffic associated with the project.

Quarterly meetings with the Snowy Valleys Local Emergency Management Committee will be attended by UGL Project management to communicate Project impacts to all attendees and Local Council and NPWS for reporting and

communication to the Public. Also, at significant milestones that will impact any Major Stakeholders and the local community.

Reporting periodicity will include be monthly for internal project reports and six-monthly for compliance reporting. Six-monthly reports will track compliance against the conditions of approval and the revised environmental management measures.

## 7. MARINE WORKS AREA

Construction maritime traffic and temporary exclusion zones on Talbingo Reservoirs has the potential to impact recreation vessels and activities and will be made up of a combination of the following:

- Construction vessels being mobilised at existing boat ramp locations;
- Vessel mooring within the reservoir; and
- Associated work vessels and crew transport vessels assisting with the above work as well as other work including survey and monitoring.

The Marine Works Area (MWA) will be defined for Talbingo Reservoir. During stringing works the delineated exclusion zone area will be closed to recreational and fishing vessels and access to the work area will be restricted to essential construction vessels. These works are estimated to last no longer than three weeks and will avoid being undertaken during holiday periods. Consultation will be held with key stakeholders to determine the appropriate and minimal timeframe this section of the waterway will be off-limits for the least amount of time.

The MWA, and any obstructions such as anchor lines will be marked with lit yellow marker buoys. Indicative mooring plans shows typical vessel location for the works. Mooring plans will be adjusted throughout the works to suit various activities and works progress.

### 7.1 TALBINGO RESERVOIR

The main construction activities requiring marine transport at the Talbingo Reservoir will be:

- Conductor stringing on 330kV transmission circuits; and
- Management of recreational vessels on the Reservoir during string activities.

There will be a drop zone and a further 30 metre exclusion zone in place during stringing works and when conductors are under tension (see Appendix D).

Marine based equipment will be required for these works and will include support work vessels. These vessels will be launched and generally operated outside of the exclusion zone as delineated by marker buoys. As the work area is focused within Ravine Bay and the Yarrangobilly arm of Talbingo Reservoir the majority of Talbingo Reservoir will not be impacted by works and will remain available to the public for normal recreational use.

Marine operations will have a direct impact on O'Hare's boat ramp and campground. To reduce the construction related impacts to the public, UGL will;

- Minimal construction traffic near public facilities;
- Utilise drones to fly winch ropes to winch location;
- Remove work vessel at the end of each shift to clear the boat ramp;
- Post warning advice (MTMP Appendix E) at O'Hares and Talbingo boat ramps on exclusion zones when winching conductor cables across Talbingo Reservoir; and
- Ensure works are scheduled to ensure construction related activities do not impact public use of roads and waterways during key recreational times.

Some vessel movement outside of this area may also be required for monitoring and associated investigation activities however, generally, this work will use one work vessel.

Vessel movement between the Middle Bay barge ramp and the Talbingo Dam boat ramp may occur during the construction period. Routine use of the Talbingo Dam boat ramp is not anticipated however periodic use may be required for safety or logistics requirements.

## 8. HOURS OF OPERATION

Marine construction operations will potentially occur 0600-1800 hrs (and out of hours works approval) per day, 7 days per week contingent on weather conditions, noise and vibrations impacts. All works are to be scheduled to ensure construction related activities do not impact public use of roads and waterways during key recreational times.

## 9. MARINE TRAFFIC CONTROL PLANS

Developed of specific Maritime Traffic Control Plans (MTCPs) will be part of the construction planning process for construction activities that affect marine traffic conditions and the safety of vessels and general public utilising Talbingo Reservoir. The MTCP will be progressively developed and reviewed throughout construction and maintenance in accordance with this MTMP and the Roads and Maritime requirements. Master of Marine vessels will be inducted into the marine compliance requirements of the MTCPs, including reservoir speed limits, exclusion zones and other safety protocols.

MTCP developed by UGL Contractor will be undertaken in consultation with the Client and TfNSW.

Emergency Services will be notified prior to the implementation of any MTCP to ensure that they are aware of the potential impacts that may affect emergency responses. Emergency Services will be consulted in advance of commencement of marine works, with a number of scenarios being work shopped to provide in advance knowledge, resourcing requirements, and response capabilities for project incident management.

## 10. INSPECTIONS & AUDITS

Inspections will be coordinated by the Waterway Controller and will occur weekly. The completed inspection reports will be provided to the Client as part of the Principal Contractor monthly reporting obligation. The exact duration of these works is not known with high certainty at the time of writing but are expected to be approximately 3 weeks, weather dependant. As an output of the audit and inspection regime, any non-conformance or opportunity for improvement will be documented, and provided to the Client with a rectification methodology and timeframe to ensure that the safety of waterway users and workers is not compromised. All rectification will be completed within 7 days based of a risk profile.

## 11. TRAINING

UGL Contractor personnel will be inducted into the requirements of the project. Specific training and induction will be provided to all personnel that work on or adjacent to the MWA relating to marine compliance, reporting, operations, and emergency response.

Specific training will be delivered via Team Briefs (weekly) and Toolbox Talks (daily) that manage daily works schedule, vessel movements, fatigue and feedback form the Waterways Controller from the previous days shift.

## 12. SAFETY

Working construction vessels will maintain radio watch on VHF Radio Channel [TBC] at all times. Where any Construction Vessel has grounded or been involved in a collision or near miss with another vessel, navigation mark, wharf or structure, the master of the Construction Vessel will immediately report the incident to UGL Waterway Controller.

The Waterway Controller is responsible for the notification of a waterway incident to the UGL Project Manager and Safety Manager to determine if statutory notifications are required.

In complying with this direction, the master of every Construction Vessel involved in any reported collision or incident shall:

- Comply with any direction from the Waterway Controller;

- As required prepare a written report for the Waterway Controller;
- Within 24hrs of notifying the Waterway Controller, provide in writing, the circumstances of the collision or incident;
- A formal investigation will be undertaken, detailing the incident, and will be provided to the Principal; and
- Cooperate fully in any subsequent investigation into the collision or incident.

All incidents will be investigated using the UGL Incident Management-Reporting and Investigation Procedure, to enable lessons learned and corrective actions to prevent reoccurrence. All incident and non-compliance notifications will be done in accordance with CoA's C7 – C9.

All incidents will be reported to TransGrid for communication to the relevant authority.

A written report must be forward to Roads and Maritime within 24 hours setting out the particulars of the incident if one of the following applies:

- The incident has resulted in the death, or injury to, a person;
- The incident has resulted in damage in excess of \$5,000 to a vessel or any other property; and
- Damage or risk to the environment has occurred.

## 12.1 NAVIGATIONAL AIDS, MARKERS & EXCLUSION ZONES

Working construction vessels will need to arrange anchor wire and ropes to minimise impact to the working zone. Denotation of anchors and mooring lines will be required through the deployment of lit yellow marker buoys appropriate shapes and lights, displayed between dusk and dawn.

UGL Contractor's Waterway Controller will be advised for any construction related movements in navigable sections of the river and reservoir where recreational vessels could be affected, (especially at the beginning and end of each shift).

The corners of all work vessels will be marked with appropriate navigation and clearance lights.

The exclusion zone boundary will be lit, a low intensity light such as the SL15 from Sealite, or equivalent, is to be attached to a small buoy and will be located at multiple locations along the exclusion zone.

As part of the procurement process, the successful tenderer will ensure that all vessels, staffing and services provided to UGL complies with Marine Safety (Domestic Commercial Vessel) National Law 2012. A Quality and Safety audit process is applied to all contracted services providing assurance that the service comply with all legislative and regulatory obligations. This process is report to the client periodically over the duration of the works.

## 12.2 REFUELLING

The re-fuelling of mobile equipment will not be performed onboard the construction vessel. All refuelling will be performed utilising a fuel cell on land. The flexible pipe connected to the bowser is fitted with a manually operated pump and this is equipped with a lock that will be locked shut when not in use.

Australian Standards and guidelines, particularly AS1940 The storage and handling of flammable and combustible liquids establishes the performance and benchmark auditing for this process.

The fuel cell has a fire extinguisher and spill kit that is stored nearby and is built with an internal bunded tray. The item being refuelled also needs to be bunded during refuelling.

Given the sensitive nature of Talbingo Reservoir a number of environmental considerations are proposed as listed;

1. Minimise refuelling on water by checking and filling tanks before launching.
2. Keep stored volumes of fuel to a minimum.
3. Make available suitable hydrocarbon spill kits onboard the vessel with floating boom and hydrophobic spill pads.
4. At refuelling location make available hydrocarbon spill kits.
5. As part of the prestart checklist or vessel also inspect for fuel leaks onboard.

As part of the refuelling process an exclusion zone will be established around the vessel. All personnel involved in fuelling equipment will wear the following PPE:



- Rubberised or chemical gloves;
- Appropriate eye protection;
- Long pants;
- Hi-Vis long sleeve shirt;
- Safety boots; and
- Personal Flotation Device (PFD)

### 12.3 CHEMICALS & DANGEROUS GOODS STORAGE

The Principal Contractor will ensure that all risks associated with the handling, storage and use of hazardous materials are managed as per the Safety Data Sheet (SDS) and in accordance with SafeWork NSW Code of Practice Managing Risks of Hazardous Chemicals in the Workplace August 2019.

All hazardous materials will be used and stored in accordance with the manufacturer's specifications and the legislative requirements.

## 13. VESSEL SPECIFICATIONS

UGL Contractors will be mobilising pieces of floating plant to Maragle 330kV Switching Station and 330kV Transmission Line Connections Project on Talbingo Reservoir. The vessels required to support this Project are listed below:

- 6m Aluminium Work Barge.

## 14. TRAFFIC MANAGEMENT PLAN

The travel path for construction vessels to and from the exclusion zone will be developed in consult with the Client and TfNSW and has been depicted in Appendix A.

During the period of marine works stringing marker buoys and lights will delineate the exclusion zone and a notice to recreational vessel operators will be posted at boat ramps.

Additional community consultative meetings will be held to ensure the views of all relevant stakeholders have been taken into consideration. These relevant stakeholders will be informed in advance of all marine works to ensure the safety and security of the MWA and exclusion zones. These additional meetings will be held at an appropriate time in advance if the marine works. Contact Catherine McGufficke 0488 690 457 (Lumea) for detail.

### 14.1 NOISE & VIBRATION MANAGEMENT

The following mitigation measures will be put in place to keep noise to a minimum;

- Diesel powered machines such as winches will not be left idling unnecessarily, particularly during rest breaks;
- Machinery engine covers are to be closed at all times;
- Operators will be encouraged to use less than full engine speed, where full power is not required, to minimise noise; and
- Plant and equipment will be regularly inspected to ensure all assets are in good working order.

Noise will be monitored, using a hand-held metering device, during the high noise periods. The results will be used to devise control methods where required with those potentially impacted by such proposed noise and agreement reached on appropriate mitigation measures to be adopted.

## 15. COMMUNICATION WITH STAKEHOLDERS

All communication with stakeholders to be directed through the UGL Project Manager and Communications team. Contact details have been established for stakeholders and the public for communication and notifications regarding the works.

Regular liaison and communication will be held with NPWS Communications Team regarding all traffic and transport that may affect NPWS roads and assets. Signage will be erected at campgrounds and boat ramps on NPWS owned land in the Project area to inform users of upcoming works and any restrictions.

The Project Manager Tim McCarthy will be responsible for notifying stakeholders and public bodies regarding stringing and construction activities that will affect the Talbingo Reservoir usage, including boat ramps and access.

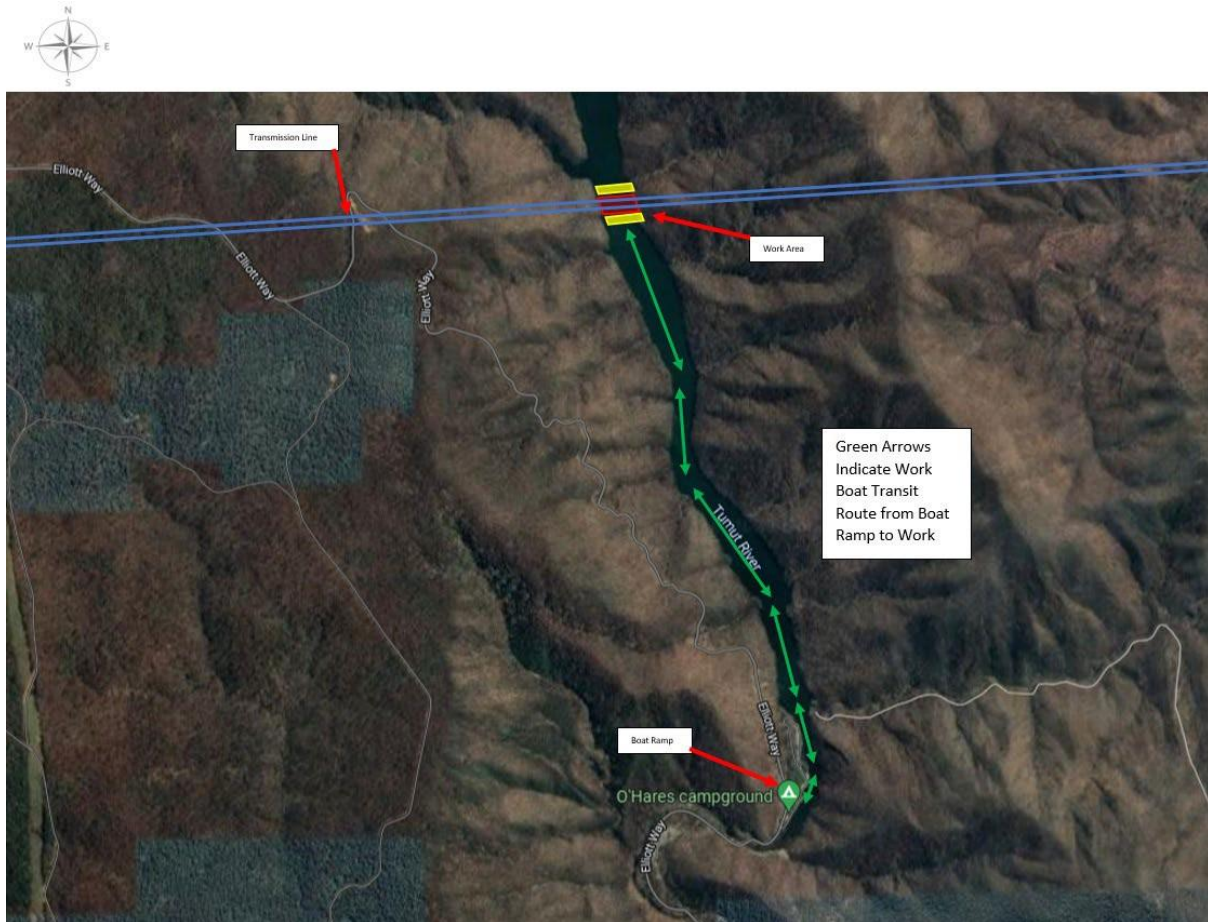
- P: 0455 087 248
- E: [tim.mccarthy@ugllimited.com](mailto:tim.mccarthy@ugllimited.com)

For further reference to Communication with stakeholders, see Communications and Stakeholder Management Plan available on the project website.

## 16. EMERGENCY MANAGEMENT

Emergency Management will be as per the Emergency Response Plan submitted and approved for the project.

## APPENDIX A MARINE TMP (TALBINGO RESERVOIR BOAT ROUTE)



Speed limitations will be placed on all commercial vessels used on this project and will be in line with TfNSW Talbingo Reservoir gazetted and posted limits.

## APPENDIX B VESSEL SPECIFICATIONS



6m Work Barge with Outboard

## APPENDIX C EXCLUSION AND DROP ZONE DELINEATION



## APPENDIX D CONDUCTOR STRINGING WMS – DUAL CIRCUIT 330KV

[PLACEHOLDER TO BE ADDED BEFORE CONSTRUCTION]

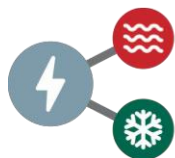
The work method statement (procedure) for performing this work has not been finalised at time of pre-construction document preparation.

The proponent commits to ensuring full consultation with relevant stakeholders on methodology, timing, communication, emergency planning, etc at least 3 – 6 months out from timing of proposed stringing activity.



## APPENDIX E TFNSW NAVIGATION WARNING TALBINGO RESERVOIR

**Note - Example Only** of Similar Signage Used by FGJV



**Future Generation**  
SALINI IMPREGILO • CLOUGH • LANE

## NAVIGATION WARNING

Talbingo Reservoir, Talbingo

**SNOWY 2.0 CONSTRUCTION WORKS – BLOCKED CHANNEL from Monday 20 December 2021 until further notice**

### THE WORKS

Vessel operators are advised that construction works associated with the Snowy 2.0 project will be occurring on the Talbingo Reservoir, Talbingo, from the start of the Yarrangobilly Arm to the Yarrangobilly River. The works will commence on Wednesday 22 December 2021 and continue until further notice.

### EXCLUSION ZONE

Due to the potential to affect the safety of navigation, an **Exclusion Zone** ('the Zone') will be established on the navigable waters of the Talbingo Reservoir from the start of the Yarrangobilly Arm to the Yarrangobilly River between the above dates.

The Zone will be marked by signage and yellow special mark aqua buoys with flashing yellow lights displayed between dusk and dawn.

### NAVIGATION WARNING

Access to the Yarrangobilly Arm of the Talbingo Reservoir is prohibited to all unauthorised vessels.

### DIRECTIONS

Transport for NSW advises:

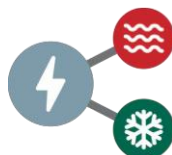
1. a) Persons within the vicinity of the Zone **must** comply with any directions given by a Boating Safety Officer or NSW Police Officer in relation to the Special Event or to marine safety. Failure to comply with any such direction is an offence (*Marine Safety Act 1998, s. 15A* - Maximum Penalty \$3,300.00).
2. b) No unauthorised vessels are permitted to enter the Zone under any circumstances, and to do so may be an offence (*Marine Safety Act 1998, s12(5)* - Maximum Penalty \$1,100.00)

## MARINE NOTICE SO2166



Transport  
for NSW

Phone 1800 766 992 [community@futuregenerationjv.com.au](mailto:community@futuregenerationjv.com.au) [www.futuregenerationjv.com.au](http://www.futuregenerationjv.com.au)



**Future Generation**

SALINI IMPREGILO • CLOUGH • LANE

### MAPS & CHARTS AFFECTED

Transport for NSW Boating Map – 21

For further information concerning this Navigation Restriction, please contact Transport for NSW (Maritime) Info line on **13 12 36**.

### MARINE NOTICE SO2166



Transport  
for NSW

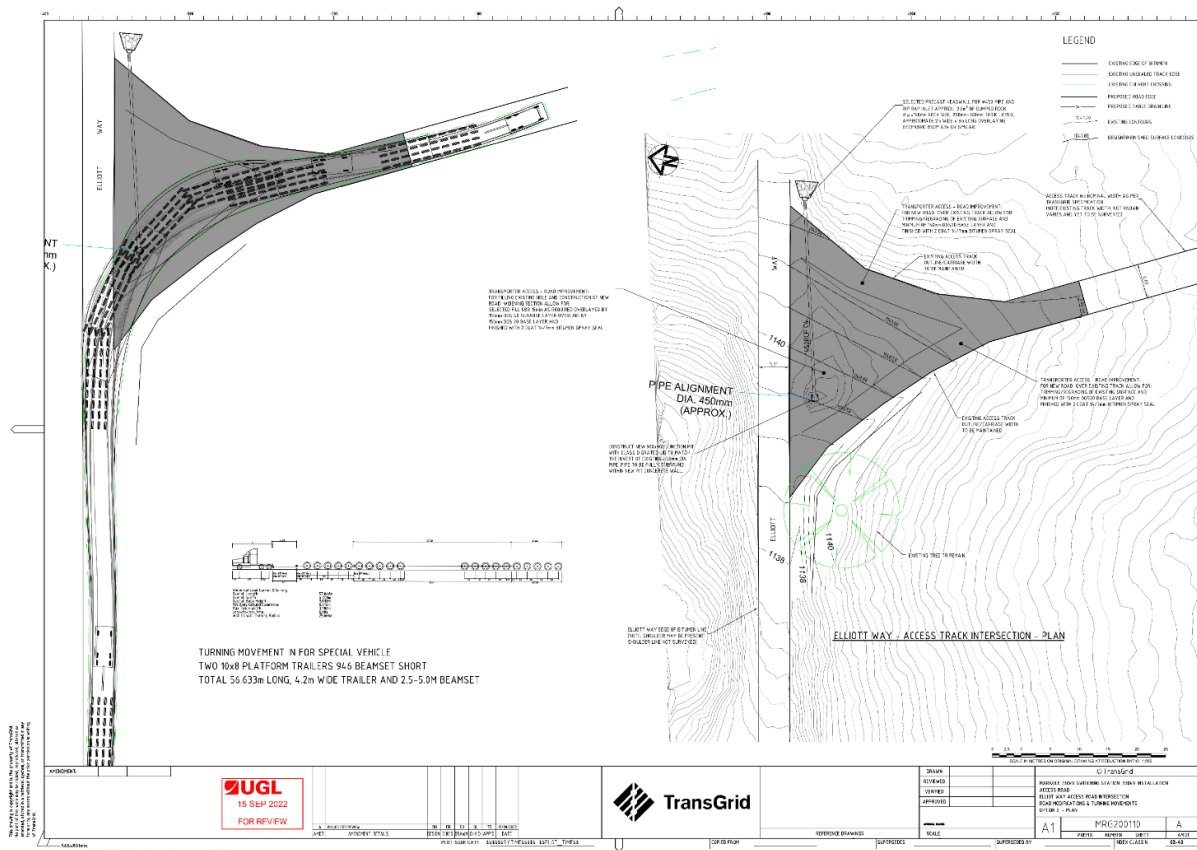
Phone 1800 766 992 [community@futuregenerationjv.com.au](mailto:community@futuregenerationjv.com.au) [www.futuregenerationjv.com.au](http://www.futuregenerationjv.com.au)

## **APPENDIX G : Turn Out for Elliott Way**

## Snowy 2.0 TCP

### Traffic and Transport Management Plan

Details of the proposed road upgrade works required for the western side of the transmission line (required by condition B27). This is the Elliott Way access road intersection leading to the Maragle Substation. Details of proposed road upgrade works for intersections with Elliott Way are provided in the Transport Strategy.





Snowy 2.0 TCP  
Traffic and Transport Management Plan

## APPENDIX H : References

- Road Transport Act 2013
- Heavy Vehicle (Adoption of National Law) Act 2013 and the Heavy Vehicle National Law
- Roads Act 1993
- AS/NZS 1742.3-2019 Traffic Control for Work on Roads
- Work Health and Safety Act 2011
- RMS Traffic Control at Worksites Manual
- S2-FGJV-HAS-WIN-053 Driving and Journey Management Work Instruction
- 3200-0645-PLN-037-CEMP-NVMP

## **APPENDIX I : UGL Chain of Responsibility Procedure**

This document forms part of the UGL-MS and requires authorised change. As such any reference to UGL, will also relate to UGL/CPB Joint Venture as part of Stage 2 works as it relates to their activities

## APPENDIX J : Driver Code of Conduct for Stage 1

### Drivers Code of Conduct

All drivers involved in Maragle Project activities are to comply with this Driver's Code of Conduct for the Maragle Project. This Driver Code of Conduct will be displayed in all site buildings and will form part of the UGL Maragle Project Induction Package to enable recording of communication and compliance sign off.

### Drivers' obligations

#### 1) Drivers **MUST** at all times:

- Adhere to all of the obligations required by law;
- Be licensed to operate the vehicle;
- Drive at no more than the legal speed limit including those imposed by the project;
- Comply with all construction and road work signs and Traffic and Transport Management Plans (TTMPs);
- Take the necessary and/or prescribed rest breaks so that operation of the vehicle is not affected by fatigue;
- Enter and leave the site with loads covered or contained and enter and leave the site in a forward direction;
- Operate the vehicle free from the effects of drugs and alcohol;
- Where it is reasonable and safe to do so, project drivers are encouraged to reduce speed at key intersections along the Snowy Mountains Highway, Link Rd, Tooma Rd, and Elliott Way; and all other access roads,
- Ensure that vehicles are operated safely and with a high degree of care and attention, and;
- Be aware of NPWS and FCNSW activities including the potential for NPWS and FCNSW plant and equipment being in operation including but not limited to heavy plant and log trucks.

#### 2) **Vehicles will be operated in a manner that is suitable to the road and weather conditions including consideration for the likelihood for encountering wildlife.**

In the event of a fauna strike or near miss, on major project access roads, drivers are to:

- Ensure their personal safety;
- Notify their supervisor who **MUST** in turn notify the UGL environmental staff or relevant Site Supervisor;
- Adhere to reporting and handling requirements within the Biodiversity Management Plan

In the event of a fauna strike on the broader road network, drivers are to:

- Ensure their personal safety;
- If safe to do so, check on the animal and / or notify UGL environmental staff or report to WIRES directly on 1300 094 737 (1300 WIRES) or the Snowy Mountains Wildlife Rescue Looking After Our Kosciuszko Orphans (LAOKO) wildlife rescue group on 02 6456 1313; and
- Where a large mammal (e.g., horse or deer) is injured UGL environmental staff will notify NPWS officers or WIRES.

Snowy 2.0 TCP  
Traffic and Transport Management Plan

- 3) **There shall be no littering either onsite or whilst operating on the roads. Rubbish is to be disposed of in appropriate bins.**
- 4) **Drivers are to notify their employer or operator immediately should the status or conditions of their driver's licence change in any way.**
- 5) **Drivers of vehicles who are required to carry snow chains, are to be competent in the fitting and driving with of snow chains;**
- 6) **Drivers are to give due consideration to the public at all times.**

This includes:

- Always behaving and driving professionally;
- Limiting the use of truck engine braking on all local roads and the Snowy Mountains Highway where safe to do so;
- Laying up in approved locations only. Stopping on unformed road shoulders is not permitted;
- Not queuing or idling on local roads. Deliveries are to be staggered to allow steady entry into site and to avoid queuing on public roads;
- Adhering to the approved heavy vehicle routes and approved turn movements;
- Covering loads on transit to and from the project site;
- Responding courteously if approached by members of the public and directing them to the relevant Site Supervisor.

### **Additional requirements for heavy vehicles or over-dimension vehicles**

In addition to the general driver requirements all heavy or over-dimension vehicle drivers involved in the Main Works are to comply with the additional requirements related to heavy vehicles.

#### **1) Drivers MUST at all times:**

- Adhere to their Chain of Responsibility requirements;
- Ensure the heavy vehicle is operated within its legal mass and dimension limits;
- Adhere to any permit to travel requirements; and
- Adhere to direction of road authorities and OSOM permit.

#### **2) Drivers are to take regular rest breaks to manage fatigue and breaks of no less than the minimum periods prescribed by the National Heavy Vehicle Regulator. For solo drivers with no Basic Fatigue Management accreditation this means:**

- For the first 11 hours a maximum of 10 hours work time with 60 minutes rest in blocks of 15 continuous minutes;
- A maximum work time of 12 hours in 24 hours with 7 continuous hours of stationary rest.

#### **3) Heavy Vehicle congestion can have a large impact on the local community, motorists and road authority operations and are of particular concern to UGL. Drivers are to avoid forming convoys where other road users are limited in vehicle movements by no-break in heavy vehicles. Heavy Vehicle movements will be monitored and avoid travel during peak periods through popular snow season destinations, i.e., Cooma, Tumut and the KNP:**

Snowy 2.0 TCP  
Traffic and Transport Management Plan

- Deliveries are to be scheduled to occur such that heavy vehicle travel through Cooma, Tumut or the KNP is avoided where practicable during the peak traffic periods (winter weekends and public holidays);
- Drivers are required to pull over and allow traffic to pass when safe to do so should excessive queuing occur on single lane roads.
- Heavy vehicles will aim to travel staggered from one another when in transit in order to minimise delays to non-construction vehicle movements.

## **APPENDIX K : Driver's Code of Conduct – Stage 2**

# Driver's Code of Conduct



## Driver's Code of Conduct

Form: DCC HLWJV	<b>VEHICLE DRIVER CODE OF CONDUCT</b>	<b>HUMELINK WEST JV</b>
Revision: A		

## Purpose and Objectives

The purpose of the Vehicle Driver Code of Conduct is to ensure that the impacts of construction traffic on transport networks and adjoining properties is minimised. This Code clearly defines and details acceptable behaviour for all vehicle drivers operating in connection with the HLJV Works including employees, suppliers, and subcontractors.

## Responsibilities of Drivers

1. Drivers must follow ALL road rules and regulations required by law.
2. Drivers must:
  - a) Hold a current and appropriate licence for the class of vehicle they are operating
  - b) Comply with speed limits on all roads
  - c) Comply with all road works speed limits
  - d) Obey construction traffic signs and devices
  - e) Obey sign posted (road) load limits
  - f) Ensure the vehicle does not exceed mass or dimension limits
  - g) Ensure loads are distributed to remain within the capacity of the vehicle and axles
  - h) Restrain loads appropriately in accordance with the NTC Load Restraint Guide.
  - i) Make sure that your vehicle is roadworthy and well maintained
  - j) Identify yourself through the IVMS system
  - k) Never share your pin number with other or use another person pin number
3. Drivers must drive safely which includes, but is not limited to:
  - a) Making sure you are medically fit to drive, have no alcohol in your system and you are not under the influence of drugs
  - b) Driving in a calm, courteous manner that is appropriate with existing road, traffic and weather conditions
  - c) Not operating any vehicles or machinery while suffering from fatigue
  - d) Implementing fatigue management and rest laws and procedures
  - e) Responding to changes in circumstances (such as delays), reporting these to your base (if possible) to implement short-term fatigue management measures
4. Making sure that your rest breaks are taken at the prescribed intervals and are effective
5. If you are concerned about the placement of a load or mass of loaded materials raise the issue with the HLJV Supervisor and do not leave site.
6. Drivers must always behave in a professional manner.
7. Drivers must adhere to routes nominated by HLWJV for each specific worksite and they must not use any roads if their weight is over the posted load limit.
8. Routes passing schools and childcare centers are subject to school zone. During the hours of 08:00-09:30 and 14:30 – 16:00 the speed limit is 40KM/H. These locations and times will be identified and confirmed by HLW JV during planning of the work and communicated to all drivers.
9. Drivers should only park or wait in approved areas as directed by HLJV. DO NOT queue at worksite gates.
10. Drivers are to arrive and depart from worksites as required by HLWJV. Drivers will be turned away if they arrive outside of the HLWJV approved hours and the truck operating company will be notified.
11. Turn vehicles off when not in use or required to idle for long periods of time.
12. Drivers must not leave their vehicle unless it is correctly parked, has been turned off, hand brake applied, and the keys removed.
13. Drivers leaving their vehicle must wear appropriate PPE (safety boots, long pants, Hi-Vis long sleeve shirt, hard hat and safety glasses).
14. Vehicles must not transfer dirt or debris onto public roads. You must use rumble grids/ wheel wash units where they are installed. If any materials are deposited on public roads you must immediately contact your Supervisor and the HLJV Supervisor to arrange for the road to be cleaned.
15. Before leaving any site it is mandatory to cover truck loads and tailgates and draw bars must be free of loose material.



16. If approached by people with enquiries about the HLJV Works, drivers should remain polite and provide them with the community information line number **1800 317 367**. Do not provide any other information about the project.
17. Drivers must comply with the HLW JV 'Non - negotiables', which have been communicated via Inductions.
18. As a courtesy to people who may be impacted by driver behavior, drivers will:
  - a) Use horns only in an emergency or for safety reasons
  - b) Not tailgate (drive too close to other vehicles)
  - c) Not use compression braking, if possible, where noise is likely to adversely impact on residents
  - d) Ensure that there is no littering
  - e) Not block residential driveways or any other access points.

## In Vehicle Monitoring System (IVMS)

An In Vehicle Management System (IVMS), also known as GPS Tracking or Telematics, is an electronic device that is installed in a vehicle or mobile machine, that enables the owner, or authorised third party, to collect and monitor vehicle data.

All HLJV authorised vehicles and road going mobile plant will be fitted with a Project approved IVMS system including a forward-facing dash camera. The platform and data received will be owned and managed by the HLJV project.

The IVMS system will provide monitoring and reporting information on driving behaviour on the following topics:

- Speeding
- Seatbelt utilisation
- 4WD engagement
- Harsh braking, cornering, and acceleration
- Driver Identification
- Idling time

HLJV will monitor adherence to the approved travel hours and routes, Bio security zones, Cultural heritage sites and No go zones through live tracking and real time Geofence alerts.

Driver behaviour reports and real time alerts will be monitored and actioned as required.

## Declaration

I have read and understand the above conditions and will ensure that I abide by this Code of Conduct.

Signed:	Date:	/	/
<hr/>			
Print Name:	Company:		

## **APPENDIX L : OSOM Bridge Assessment Report**



**Tasman Associates Pty Ltd**  
ABN 30 084 486 162

2 Innes Street  
Campbelltown NSW 2560  
(02) 4625 2517

[www.tasmanassociates.com](http://www.tasmanassociates.com)

# **Transport of TransGrid Reactor Loads for Maragle Substation Over Burra Creek and Paddys River near Tumbarumba, NSW. Assessment of Bridges for Hitachi Energy Australia Pty Ltd**





Tasman Associates Pty Ltd

# Transport of TransGrid Reactor Loads for Maragle Substation Over Burra Creek and Paddys River near Tumbarumba, NSW. Assessment of Bridges

for

## Hitachi Energy Australia Pty Ltd

### Summary:

This report covers the assessment of 2 bridges near Tumbarumba in southern New South Wales along the proposed route of the movement of Reactor loads for HumeLink. The bridges are located on the Tooma Road. Photographs of each structure are included in the following report.

Date:	27 <sup>th</sup> November 2023
Report Number:	628/2311 Rev A
Copies:	Hitachi Energy Australia Pty Ltd
	Tasman Associates Pty Ltd
Report Author:	B Judd, K Littlefair
Technical Approval:	B Judd
Authorised for External Distribution:	M Littlefair

### Disclaimer:

1. This report has been prepared at the request of, and for the purposes of the client only, and neither *Tasman Associates Pty Ltd* nor its associates, nor any employees or both, accept any responsibility on any ground whatsoever, including liability and negligence to any other person or organisation.
2. In completing and collating this report, *Tasman Associates Pty Ltd* has collected, summarised and relied on information supplied to us by third parties. We have not verified the accuracy of the information and therefore do not accept any responsibility, and cannot be held liable for the information from which this report has been prepared.



The details contained in this report are confidential and copyright.

This report has been expressly prepared for Hitachi Energy Australia Pty Ltd and may not be used for any purpose other than the transport of Reactor loads over Burra Creek and Paddys River bridges on the Tooma Road by any person or organisation without the expressed written approval of both Hitachi Energy Australia Pty Ltd and Tasman Associates Pty Ltd.

Reproduction of any portion either electronically or in paper format of this report without the approval of both the above-named parties is expressly forbidden.

**PLEASE NOTE:**

This report has been prepared for Hitachi Energy Australia Pty Ltd and must not be used for any loads and load configurations other than those shown in the attached and under the auspices of Hitachi Energy Australia Pty Ltd. The recommendations contained in this report for travel over the bridge are applicable up to 31<sup>st</sup> October 2024. These structures must be inspected a maximum of 6 months prior to the load movements to ensure that there has been no change from the comments in this report.



# 1. INTRODUCTION

## 1.1 Background

Hitachi Energy Australia Pty Ltd have been contracted to provide Reactor(s) for the HumeLink project which will traverse a route including the Tooma Road (near Tumbarumba in southern New South Wales) to the final location. The actual transport organisation has not been established at the time of this report, and as such, no specific comments can be made on the load configuration to be used other than on the information attached.

The subject of this report are the bridges located over Burra Creek and Paddys River on the Tooma Road in the south of New South Wales.

*Tasman Associates Pty Ltd* were commissioned to assess the bridge as noted above prior to the movement of the loads in order to report on the suitability of the structures for the loads and provide commentary on any specific requirements.

## 1.2 Scope

In order to transport these loads, Hitachi Energy Australia Pty Ltd need to determine the adequacy of the structures and to provide comment on any requirement.

# 2. FIELD OBSERVATIONS

## 2.1 General

The inspection was undertaken on 24<sup>th</sup> October 2023. Weather on this day was fine and cool with temperatures consistently around 15°C. It was noted that there was considerable water running under the structures in the creek proper. It was also that noted several semi-trailers and trucks with quad axle trailers crossed the structures at road speed.

It should be noted that no physical testing was undertaken or considered necessary by *Tasman Associates* during these inspections, nor has it been reported in the format of the Department for Transport NSW.

As stated above, no load configurations have been provided to *Tasman* for this study other than previous proposals. The load cases previously considered were a Heavy Load Platform beam set of 2 x 10 and 8 wheels per axle line with an axle load of 15 tonnes per line or a Platform of 14 axles with 8 wheels per axle



line with an axle load of 15 tonnes per line and a Platform of 16 axles with 8 wheels per axle line with an axle load of 15 tonnes per line. As shown in Clause 2.1.3 below, the 15 tonnes axle load overloads the piers and only the 13.5 tonne axle load is acceptable.

From the Transport for NSW website, it has been noted that Tooma Road allows for the movement of B Double vehicles. See Attachment C where green designates the approved B Double routes.

### 2.1 Burra Creek (GPS -35.82822, 148.06066)

The structure inspected is described below, together with several comments.

*Tasman Associates'* personnel have inspected the bridge and find it to be in reasonable condition as expected from a structure of its age.

#### 2.1.1 General Notes

The bridge, constructed approximately 1937, is located several kilometres south east of Tumbarumba. At the time of inspection, water was flowing along the creek.

The structure is of three spans with two 455 mm x 455 mm concrete columns at each of the piers with concrete headstocks supporting a cast in-situ concrete deck. End spans are 4.72 metres in length, while the internal span is 5.79 metres in length. Overall width of the structure is 6.6 metres and width between kerbs is 6.1 metres, while the total length is 15.9 metres. The width of the bridge allows for two traffic lanes. The concrete deck has been constructed with kerbs on both sides of the structure.

The bridge is a fully continuous framed structure. Accordingly, there are no bearings in the structure.

The abutments are of concrete construction with small wingwalls fitted to both sides. From the drawing 1325b provided to *Tasman* the piers are founded on spread footings of 1.2 metres x 1.2 metres, while the abutments are founded on a spread footing of 760mm in width. Settlement was not evident, however, none of the footings were visible.

Bridge railing consists of vertical concrete posts and rails. The approach guardrails are of corrugated metal and are in good condition. There is no batter protection visible at the abutments, despite being shown on drawing 282B502/1. Bridge approaches are elevated above the surrounding land and have been surfaced with sprayed seal.

Since the previous inspection by *Tasman* personnel in August 2022, a walkway of composite mesh has been installed under the Tumbarumba abutment to allow pedestrian access along the walking track.





### 2.1.2 Condition Notes

This section of notes does not purport to be a Level 2 bridge inspection.

#### **a) Approaches**

The approach roadway is of sprayed seal surfacing. At the eastern end, some deformation of the surfacing was noted adjacent to the bridge deck on the northern side, forming small pot holes which have been previously noted by *Tasman* in the report 606/2217 of 5<sup>th</sup> September 2022.

This could be addressed as maintenance issue for the Council but will not affect the transport of the load.

#### **b) Abutments**

Both concrete abutments are in good condition, however, on the eastern end, northern side, some erosion of the embankment was noted beside the abutment.

This again could be addressed as a Council maintenance issue but will not affect the transport of the load.

#### **c) Bridge Deck**

a) Columns and Headstocks. The concrete of both appeared to be in good condition.

b) Cast in situ deck appeared to be in good condition, however, resurfacing the deck with a sprayed seal would improve durability

These are again addressed as a Council maintenance issue and will not affect the transport of the load

### 2.1.3 Load Capacity

The structural effects of the previously proposed 15.0 tonnes per axle Heavy Load Platform (HLP) has been compared with two design T44 truck configurations. Applying the relevant load impact factors and load reduction factors for concurrent T44 loading, the structural effects slightly exceeded the pier design load. Limiting the HLP platform to 13.5 tonnes per axle satisfies T44 loading for pier reactions, deck bending moments and individual wheel load shear effects. It is to be noted that an axle load of 15 tonnes per axle line is not acceptable for this structure.

As noted above, the bridge is in sound condition. *Tasman Associates* recommends that a twin 10 x 8 HLP with an axle load of 13.5 tonnes per axle line may be transported along this roadway in the



centre of the roadway. Providing the HLP load is limited to 13.5 tonnes per axle at a spacing of 1.8 metres, other configurations of axle numbers are acceptable.

## 2.2 Paddys River (GPS -35.85154 148.13993)

The structure inspected is described below, together with several comments.

*Tasman Associates'* personnel have inspected the bridge and find it to be in reasonable condition as expected from a structure of its age.

### 2.2.1 General Notes

The bridge, constructed approximately 1930, is located several kilometres south east of Burra Creek and Tumbarumba. At the time of inspection, water was flowing along the creek.

The structure is of three spans with three 600 mm x 600 mm concrete columns at each of the piers with concrete headstocks supporting three reinforced concrete beams with a cast in-situ concrete deck over. The three beams are 355mm wide with the depth varying from 635mm to 976mm. End spans are 6.25 metres in length, while the internal span is 9.14 metres in length. Overall width of the 2 lane structure is 6.96 metres and width between kerbs is 6.1 metres, while the total length is 21.7 metres. The concrete deck has been constructed with kerbs on both sides of the structure.

The deck and the piers are continuous, however, the abutments have the three girders seated on sliding plate bearings at the Tumbarumba end, while the Tooma abutment has been shown as the Fixed abutment.

The abutments are of concrete construction with wingwalls fitted to both sides. From the drawing 0282 435BC0101/2 provided to *Tasman*, the abutments are founded on a footing 1.52 metres width and the piers are founded 455mm into sound rock with bars of 28mm x 760mm embedded into rock. None of the foundations were visible.

Bridge railing consists of vertical steel posts and rails. The approach guardrails are of corrugated metal and are in good condition. Bridge approaches are elevated above the surrounding land and have been surfaced with sprayed seal.

### 2.2.2 Condition Notes

This section of notes does not purport to be a Level 2 bridge inspection.



### **a) Approaches**

The approach roadway is of sprayed seal surfacing. At the eastern end, some deformation of the surfacing was noted adjacent to the bridge deck on the northern side.

This could be addressed as maintenance issue for the Council but will not affect the transport of the load.

### **b) Abutments**

Both concrete abutments are in good condition, however, some cracking was noted in the wingwalls at both ends of the structure. Some minor erosion was noted in the waterway at the Tumbarumba abutment and which can be easily repaired by the placement of rocks and/or slurry concrete.

This again could be addressed as a Council maintenance issue and will not affect the transport of the load.

### **c) Bridge Deck**

- a) Columns and Headstocks. The concrete of both appeared to be in good condition.
- b) Concrete beams. The beams all appear to be in good condition with no obvious cracks or spalls noted.
- c) Cast in situ deck. The deck appears to have been repaired at some point in the past, by placing a strip of concrete on either side of a central placement which appears to date from original construction. This is evidenced by the two longitudinal joints and different appearance of the deck and which are not shown on the Works As Executed drawings.

The central portion of the deck exhibits cracking along the length of the bridge (see attached photos) and to enable continued durability of the structure, a waterproofing layer should be applied followed by a wearing course. The wearing course could be dense grade asphalt.

- d) Bearings. The plate bearings at the Tooma end show corrosion but appear to be fit for purpose, however, at the Tumbarumba abutment, the centre bearing has moved to the extent that it appears to be “walking out” and may dislodge from under the beam as noted in *Tasman’s* previous report. This requires attention as soon as possible for durability of the structure, and only requires a simple treatment of driving the plates back under the beam. A ladder will be required to access the bearing.



### 2.2.3 Load Capacity

The structural effects of the previously proposed 15.0 tonnes per axle Heavy Load Platform (HLP) has been compared with two design T44 truck configurations. Applying the relevant load impact factors and load reduction factors for concurrent T44 loading, the structural effects slightly exceeded the pier design load. Limiting the HLP platform to 13.5 tonnes per axle satisfies T44 loading for pier reactions, deck bending moments and individual wheel load shear effects. It is to be noted that an axle load of 15 tonnes per axle line is not acceptable for this structure.

As noted above, the bridge is in sound condition. *Tasman Associates* recommends that a twin 10 x 8 HLP with an axle load of 13.5 tonnes per axle line may be transported along this roadway in the centre of the roadway. Providing the HLP load is limited to 13.5 tonnes per axle at a spacing of 1.8 metres, other configurations of axle numbers are acceptable.

Considering the bridge was open to traffic on 1930, it is in reasonable condition and *Tasman Associates* recommends that the twin 10 x 8 HLP with an axle load of 13.5 tonnes per axle line may be transported along this roadway in the centre of the roadway. The number of axles per HLP may vary providing the axle load is limited to 13.5 tonnes and the spacing is a minimum of 1.8 metres.

## 3. RECOMMENDATIONS

Currently the condition of the bridges inspected by *Tasman Associates Pty Ltd* is as would be expected for structures of its age and as shown in 2 above.

*Tasman* has noted that the axle loads of 15.0 tonnes per line are not acceptable given the age and condition of the structures. *Tasman* proposes that a maximum axle load of 13.5 tonnes be used to cross the structures.

With that restriction, the movement of the 13.5 tonnes per axle line HLP is to satisfy the following restrictions;

- The central abutment bearing at Paddys River is repositioned under the girder.
- Load to be transported along the centre of the bridges (within 1 metre of the centre).
- No other vehicles on the structures at the same time as the load.
- Speed of the load over the bridges not to exceed 15 km/hr.
- No sudden acceleration or braking while the load is on the structures.
- The bridges to be assessed again a maximum of 6 months prior to the movement of the loads.



# Appendix A Photographs





## Burra Creek Bridge



Photo 1. View from north side, west end. Note path under abutment nearest camera.



Photo 2. View of bridge from west end.





Photo 3. Underside of deck with pier columns and headstock. West span.



Photo 4. Minor damage to bridge rail post with some cracking.





Photo 5. Minor damage to bridge rail post.



Photo 6. Pot hole at end of deck in road surfacing east end, north side.





Photo 7. Track of composite mesh material under Tumbarumba abutment.



Photo 8. Date plaque on east end, north side.



## Paddys River Bridge



Photo 9. South side view of bridge.



Photo 10. View along deck from west end.





Photo 11. Underside of bridge. Note flood debris at pier.



Photo 12. Typical crack in wingwall/abutment





Photo 13. Tooma abutment (east end) bearing. Note on WAE drawings as a “fixed” abutment.

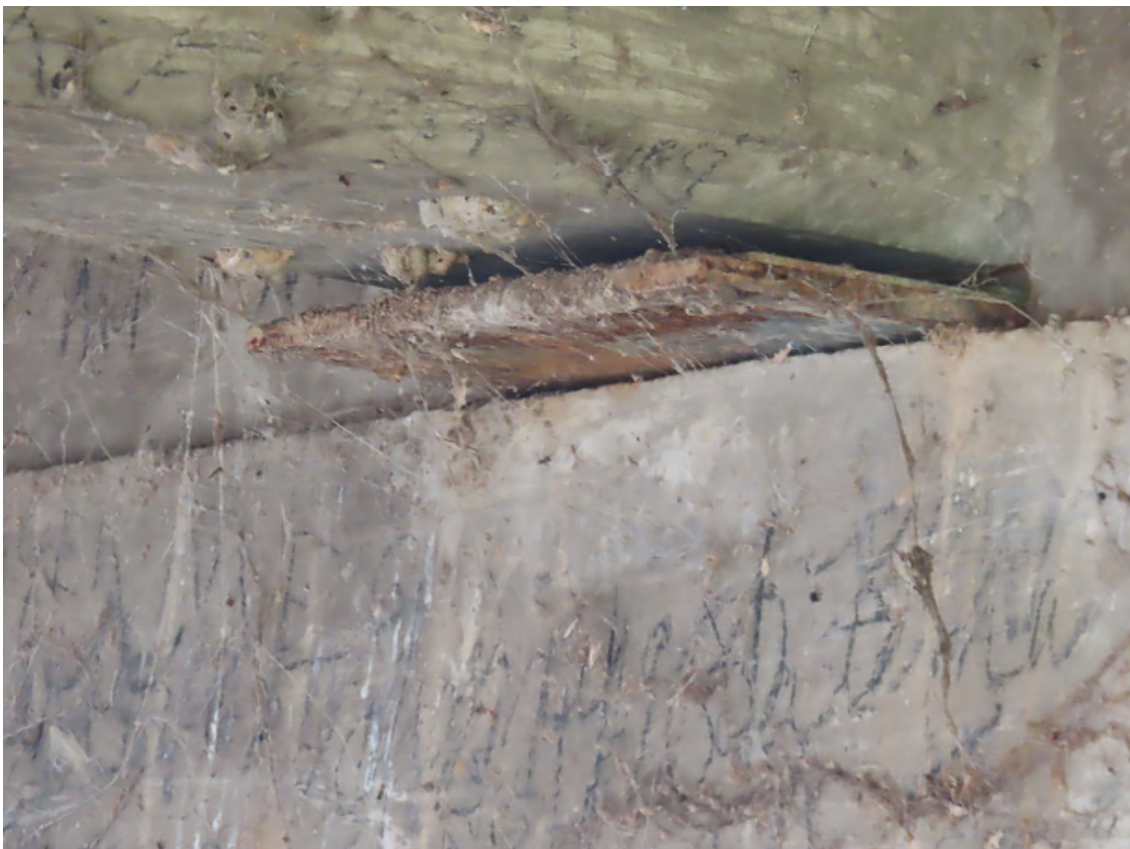


Photo 14. Tumbarumba (west) abutment. Centre beam bearing dislodged.





Photo 15. Longitudinal crack in centre portion of deck.  
(arrowed)



Photo 16. Transverse crack (arrowed) and longitudinal construction joint in deck





Photo 17. Transverse cracks in centre portion of deck. Note longitudinal construction joints (arrowed)



Photo 18. Transverse cracks in deck near east abutment.





Photo 19. West span showing slight exposed footing under abutment.



Photo 20. West abutment with slight erosion.





Photo 21. Side of bridge showing fixing arrangement for bridge railing.

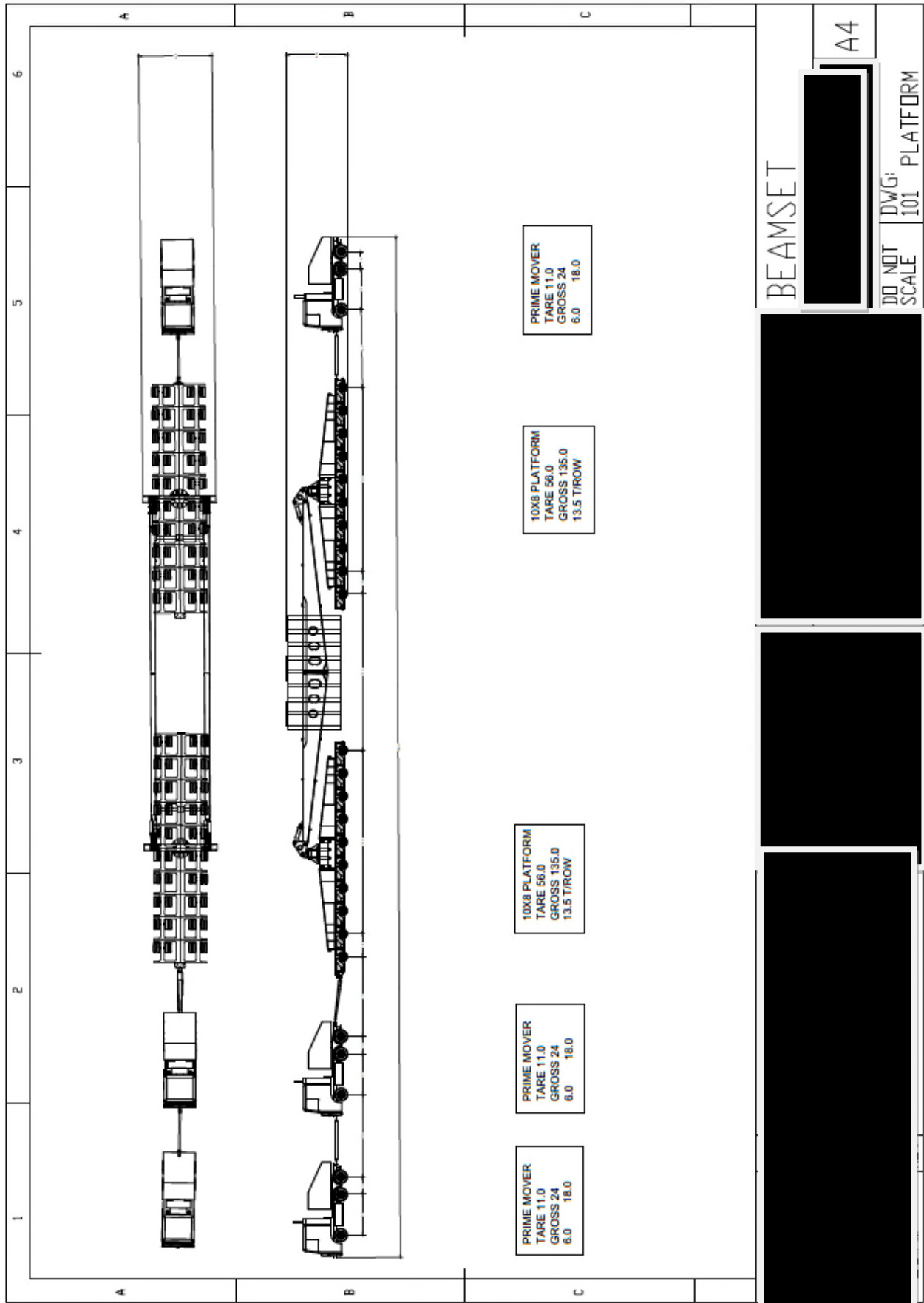


Photo 22. Date plaque on bridge showing construction date of 1930.

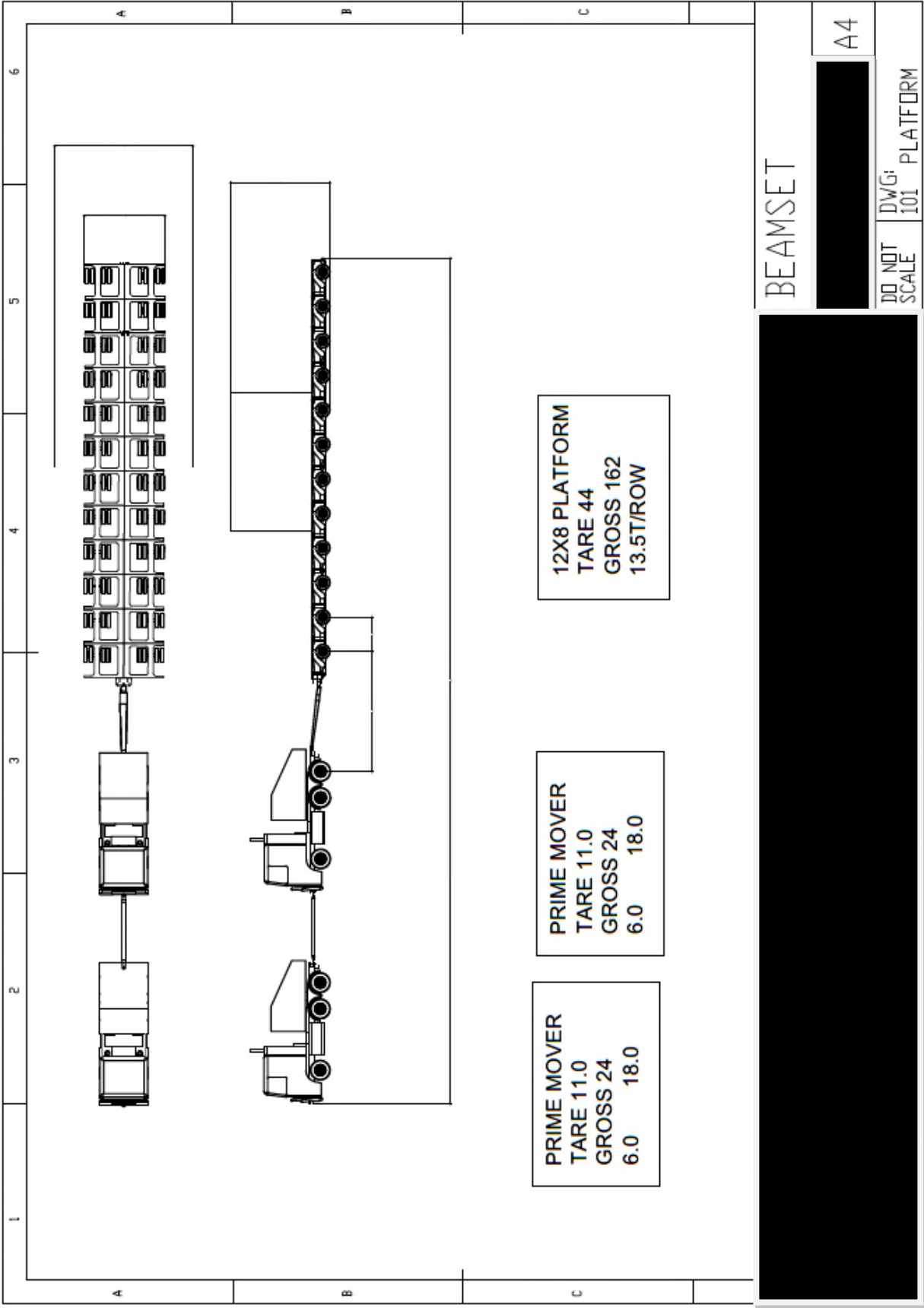


# **Appendix B**

## **Acceptable Load Configurations**



10 x 8 Beamset with 13.5 tonnes per axle line.





# **Appendix C**

## **Road Access Map**





## NSW Combined Higher Mass Limits (HML) and Restricted Access Vehicle (RAV) Map



Transport  
for NSW

Map last updated: 05/08/2022



### Legend

#### GML and CML networks

- |   |  |   |
|---|--|---|
| 25/25m B-double Routes                                    | Approved Routes With Travel Conditions                       | Exception Routes (not approved)                               |
| Approved Areas  | Approved Areas with Travel Conditions                        | Restricted Structures - Bridges                               |
| Restricted Structures with Conditional Access - Bridges   | Restricted Structures - Intersections                        | Restricted Structures - Intersections with Conditional Access |
| Low Clearance Bridge (< 4.3m) - Through Traffic on Bridge | Low Clearance Bridge (< 4.3m) - Through Traffic under Bridge |   |

#### Network Disclaimer

The networks are available for short combinations (up to 18 metres long) and B-doubles that comply with the requirements contained in the Heavy Vehicle National Law (HVNL), the [National Class 2 Heavy Vehicle B-double Authorisation \(Notice\)](#) and the [adjoining NSW Schedule](#) and for Higher Mass Limits (HML) the [New South Wales Higher Mass Limits Declaration 2015](#). These networks are based on a maximum vehicle width of 2.5 metres and are subject to sign-posted restrictions.

#### Provide feedback

[Contact Roads and Maritime Services](#) | Phone: 131 782

© Department of Finance and Services 2015  
[www.nsw.gov.au](http://www.nsw.gov.au)  
DISCLAIMER ACCEPTED



# **Appendix D**

## **Additional Load Configurations**



### COMMENT FOR REVISION A OF THIS REPORT.

Following submission of the original of this report on 6<sup>th</sup> November 2023, additional load configuration details were provided by BLIS Logistics through Hitachi Energy Australia Pty Ltd. Two load conditions have been detailed – 140.5 tonne transformer and 153.5 tonne transformer. Any increase in these load weights on completion of manufacturing of the units must be immediately advised for consideration prior to any movement along this road.

The configurations provided by BLIS indicate that the load platforms are approximately equal to or exceed the overall length of the bridges on this road.

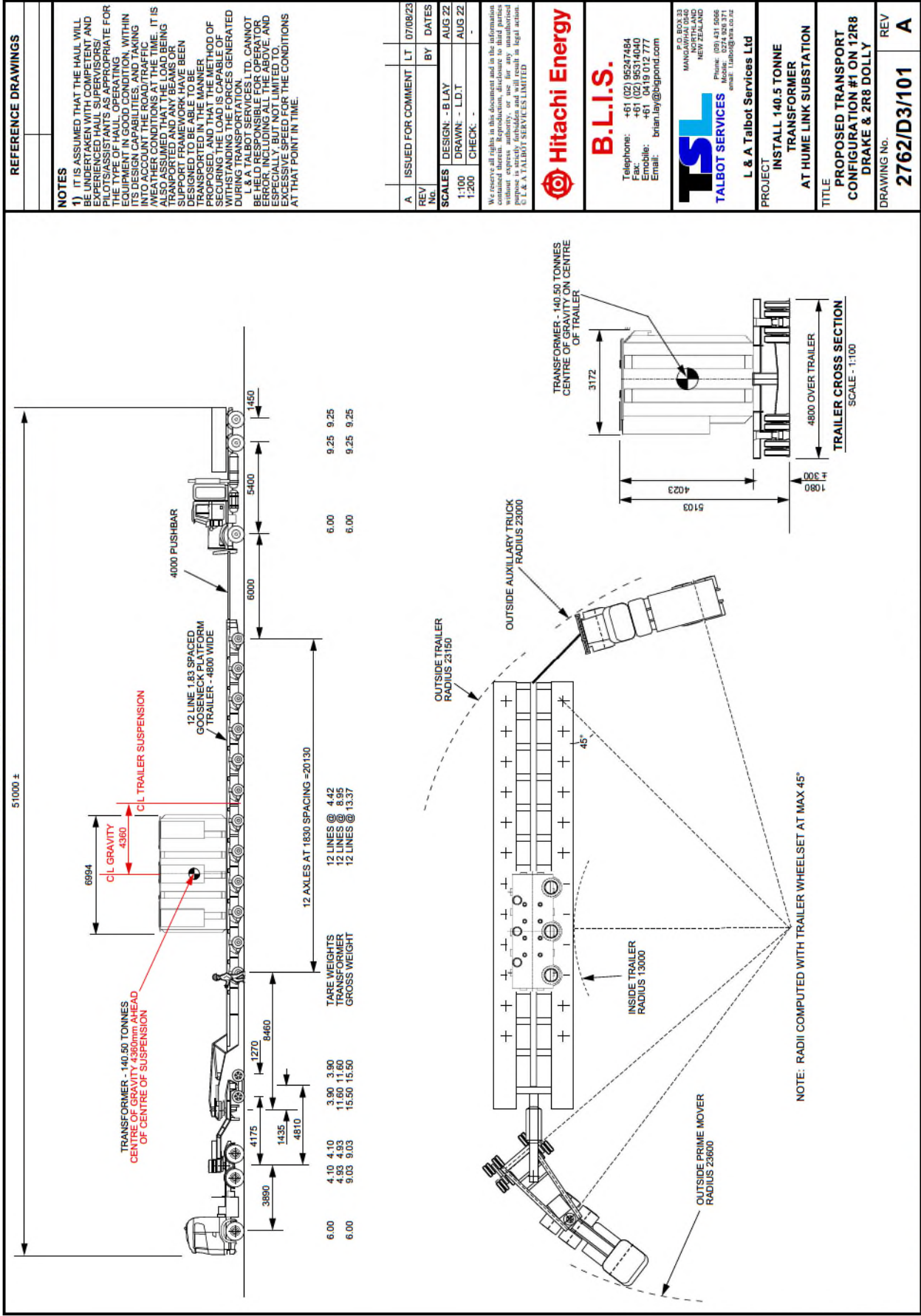
It is noted that the arrangement shown on drawing 2762/D3/102 Rev A shows an axle load of 14.46 tonnes. This is in excess of the 13.5 tonnes per axle calculated by Tasman Associates Pty Ltd and as set out in the original of this report. As a result, this arrangement is not approved for this route.

The configurations shown on drawings 2762/D3/101 Rev A (13.37 tonnes per axle), 2762/D3/111 Rev A (13.34 tonnes per axle), 2762/D3/112 Rev A (12.84 tonnes per axle) and 2762/D3/113 Rev A (13.09 tonnes per axle) are approved for this route with the condition that the load is equally distributed to all axles in the assembly.

As a summary, the movement of the proposed loads are approved with the following conditions:

- Axle loads on the Platforms are not to exceed 13.5 tonnes per axle.
- Total transformer weights as shown above are to be adhered to.
- The central abutment bearing at Paddys River is repositioned under the girder.
- Load to be transported along the centre of the bridges (within 1 metre of the centre).
- No other vehicles on the structures at the same time as the load.
- Speed of the load over the bridges not to exceed 15 km/hr.
- No sudden acceleration or braking while the load is on the structures.
- The platforms utilised for these movements must share the load is equally distributed to all axles in the assembly. This must be checked prior to load movement.
- The bridges to be assessed again a maximum of 6 months prior to the movement of the loads.
- The configurations shown attached (with the exception of drawing 2762/D3/102A Rev A) are the only approved load configurations to be moved under the auspices of B.L.I.S.

HEAVY LIFT AND TRANSPORT ENGINEERING AND PLANNING

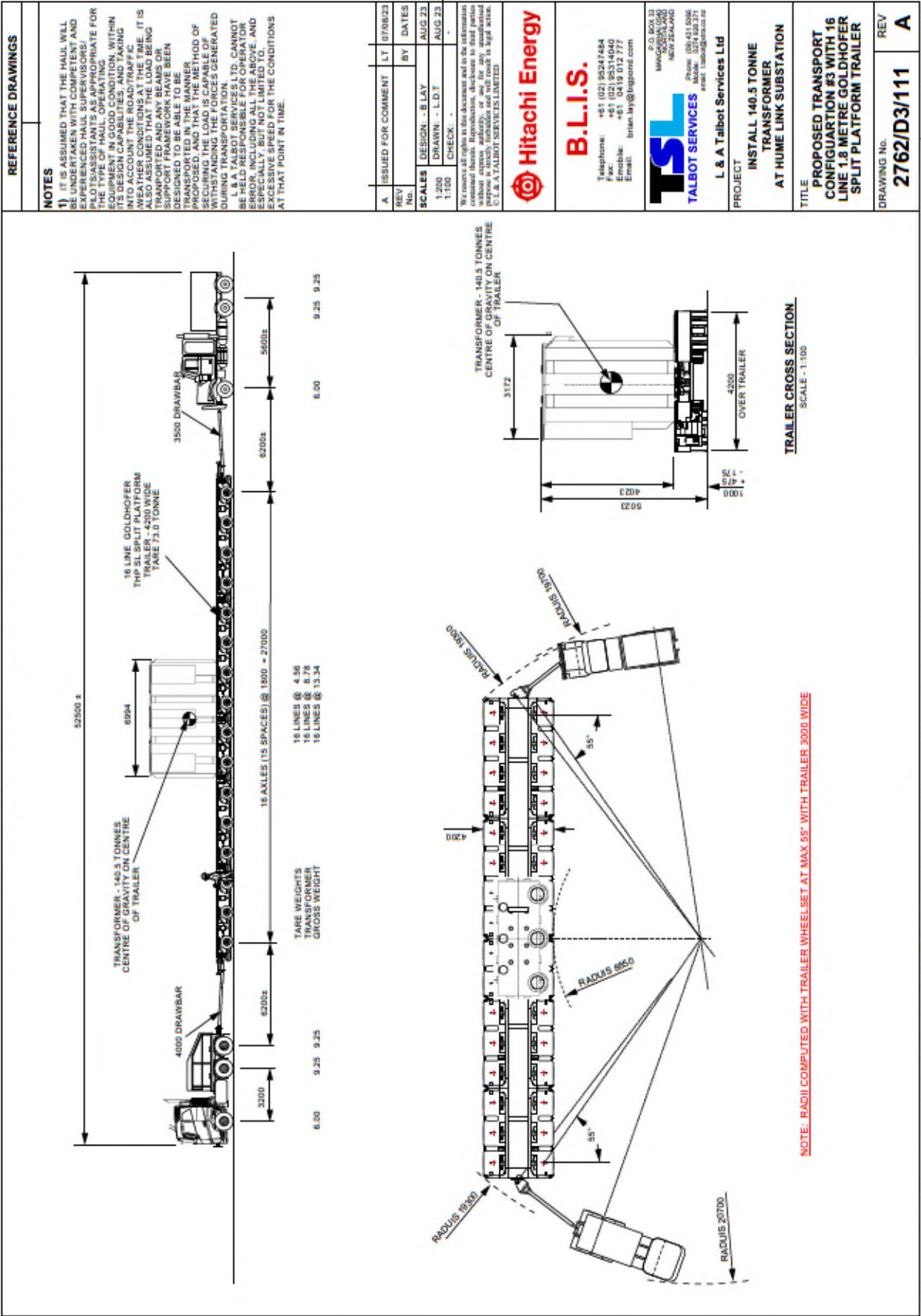



REFERENCE DRAWINGS	
<b>NOTES</b>	
1) IT IS ASSUMED THAT THE HAUL WILL BE UNDERTAKEN WITH COMPETENT AND EXPERIENCED HAUL SUPERVISORS/PILOTS/ASSISTANTS AS APPROPRIATE FOR THE TYPE OF LOAD AND EQUIPMENT. EQUIPMENT IN GOOD CONDITION, WITHIN ITS DESIGN CAPABILITIES, AND TAKING INTO ACCOUNT THE ROAD/TRAFFIC WEATHER CONDITIONS AT THE TIME. IT IS ASSUMED THAT THE HAULING AND BEING TRANSPORTED AND ANY BEANS OR SUPPORT FRAMEWORK HAVE BEEN DESIGNED TO BE ABLE TO BE TRANSPORTED IN THE MANNER DESCRIBED. THE METHOD OF SECURING THE LOAD IS CAPABLE OF WITHSTANDING THE FORCES GENERATED DURING TRANSPORTATION. L & A TALBOT SERVICES LTD. CANNOT BE RESPONSIBLE FOR ANY DAMAGE TO THE LOAD, INCLUDING ALL THE ABOVE, AND ESPECIALLY, BUT NOT LIMITED TO, EXCESSIVE SPEED FOR THE CONDITIONS AT THAT POINT IN TIME.	
A	ISSUED FOR COMMENT LT 07/08/23
REV	BY DATES
1	DESIGN - B LAY AUG 22
2	DRAWN - L.D.T. AUG 22
3	CHECK - -
We reserve all rights in this document and the information contained herein. Reproduction, disclosure to third parties without express authority, or use for any unauthorized purpose, is prohibited. We warrant that the information is true and correct to the best of our knowledge.	
<b>Hitachi Energy</b>	
<b>B.L.I.S.</b>	
Telephone: +61 (02) 95247484 Fax: +61 (02) 95314040 Mobile: +61 0419 012 777 Email: brian.lay@gsgpond.com	
<b>TSL</b> TALBOT SERVICES L & A Talbot Services Ltd P.O. BOX 33 MANCAVIAHIA 0540 NEW ZEALAND Phone: 09 431 0444 Mobile: 0274 368 371 email: l.talbot@tsl.co.nz	
PROJECT INSTALL 140.5 TONNE TRANSFORMER AT HUME LINK SUBSTATION	
TITLE PROPOSED TRANSPORT CONFIGURATION #1 ON 12R8 DRAKE & 2R8 DOLLY	
DRAWING No.	REV
2762/D3/101	A

Approved for this route



HEAVY LIFT AND TRANSPORT ENGINEERING AND PLANNING



REFERENCE DRAWINGS			
NOTES			
1) IT IS ASSUMED THAT THE HAUL WILL BE UNDERTAKEN WITH COMPETENT AND EXPERIENCED HAUL SUPERVISORS/ PLATTS ASSISTANTS AS APPROPRIATE FOR THE TYPE OF HAUL OPERATING EQUIPMENT IN GOOD CONDITION, WITHIN ITS DESIGN CAPABILITIES, AND TAKING INTO ACCOUNT THE ROAD/TRAFFIC WEATHER CONDITIONS AT THE TIME. IT IS ALSO ASSUMED THAT THE LOAD BEING TRANSPORTED AND ANY BEAMS OR SUPPORT FRAMEWORK HAVE BEEN DESIGNED TO BE ABLE TO BE TRANSPORTED IN THE MANNER REQUIRED. THE HAULING COMPANY MUST SECURE THE LOAD IS CAPABLE OF WITHSTANDING THE FORCES GENERATED DURING TRANSPORTATION. AS L & A TALBOT SERVICES LTD. CANNOT BE HELD RESPONSIBLE FOR ANY ERROR, INCLUDING ALL THE ABOVE, AND ESPECIALLY, BUT NOT LIMITED TO, EXCESSIVE SPEED FOR THE CONDITIONS AT THAT POINT IN TIME.			
A	ISSUED FOR COMMENT	LT	07/06/23
REV	BY	DATES	
1	1200	DESIGN - B LAY	AUG 23
2	1200	DRAWN - L D T	AUG 23
3	1200	CHECK -	-
We reserve all rights in this document and in the information contained therein. Reproduction, disclosure to third parties without express authority of the author is prohibited. The information contained herein is for the use of the client only and is not to be used for any other purpose. L & A TALBOT SERVICES LIMITED			
 <b>Hitachi Energy</b>			
<b>B.L.I.S.</b>			
Telephone: +61 (02) 95247464 Fax: +61 (02) 95314040 Mobile: 0419 012 777 Email: brian.ly@bllis.com			
 <b>TALBOT SERVICES</b> P.O. BOX 13 HAWKESBURY NSW 2120 AUSTRALIA Phone: (08) 431 5986 Mobile: 0274 568 371 Email: t.slab@talsl.com.au			
<b>L &amp; A Talbot Services Ltd</b>			
PROJECT INSTALL 140.5 TONNE TRANSFORMER AT HUME LINK SUBSTATION			
TITLE PROPOSED TRANSPORT CONFIGURATION #3 WITH 16 LINE 1.8 METRE GOLDHOFER SPLIT PLATFORM TRAILER			
DRAWING No.	2762/D3/111	REV	A

Approved for this route.

54,320 ±

3500 DRAWBAR

6200 ±

17 AXLES (16 SPACES) @ 1800 = 29,880

6200 ±

5600 ±

9294

TRANSFORMER - 140.5 TONNES  
CENTRE OF GRAVITY ON CENTRE  
OF TRAILER

3500 DRAWBAR

17 LINES @ 4.57  
17 LINES @ 8.26  
17 LINES @ 12.84

TARE WEIGHTS  
TRANSFORMER  
GROSS WEIGHT

4200

35°

RADIUS 2000

RADIUS 6460

RADIUS 21700

TRANSFORMER - 140.5 TONNES  
CENTRE OF GRAVITY ON CENTRE  
OF TRAILER

3172

4020

4200

OVER TRAILER

TRAILER CROSS SECTION  
SCALE - 1:100

NOTE: RADII COMPUTED WITH TRAILER WHEELSET AT MAX 55° WITH TRAILER 3000 WIDE

**REFERENCE DRAWINGS**

**NOTES**

1) IT IS ASSUMED THAT THE HAUL WILL BE UNDERTAKEN WITH COMPETENT AND EXPERIENCED HAUL SUPERVISORS AND THAT THE HAULING OPERATOR WILL BE RESPONSIBLE FOR THE TYPE OF HAUL, OPERATING EQUIPMENT IN GOOD CONDITION, WITHIN ITS DESIGN CAPABILITIES, AND TAKING INTO ACCOUNT THE WEATHER AND ROAD WEATHER CONDITIONS AT THE TIME. IT IS ALSO ASSUMED THAT THE LOAD BEING TRANSPORTED AND ANY BEAMS OR BRACKETS USED TO SECURE IT HAVE BEEN DESIGNED TO BE ABLE TO BE TRANSPORTED IN THE MANNER PROPOSED, AND THAT THE METHOD OF SECURING THE LOAD IS CAPABLE OF WITHSTANDING THE SHOCKS AND VIBRATIONS GENERATED DURING TRANSPORTATION. L & A TALBOT SERVICES LTD. CANNOT BE HELD RESPONSIBLE FOR OPERATOR ACTIONS OR NEGLIGENCE, AND WILL NOT BE RESPONSIBLE FOR EXCESSIVE SPEED FOR THE CONDITIONS AT THAT POINT IN TIME.

A	REV	ISSUED FOR COMMENT	LT	BY	DATES
1	200	DESIGN - B LAY			AUG 23
1	200	DRAWN - L D T			AUG 23
1	200	CHECK -			-

We reserve all rights in this document and the information contained therein. Reproduction, disclosure to third parties without the written consent of L & A Talbot Services Ltd. is strictly prohibited and will result in legal action. C & A TALBOT SERVICES LIMITED

**Hitachi Energy**

**B.L.I.S.**

Telephone: +61 (02) 95247444  
Fax: +61 (02) 95314040  
Mobile: +61 0419 012 777  
Email: brian.lay@bigpond.com

**TSL**  
TALBOT SERVICES  
P O BOX 13  
MANAWATU, 5040  
NEW ZEALAND  
Phone: 061 651 5566  
Mobile: 0274 148 371  
Email: talbot@tsl.co.nz

**L & A Talbot Services Ltd**

**PROJECT**  
INSTALL 140.5 TONNE  
TRANSFORMER  
AT HUME LINK SUBSTATION

**TITLE**  
PROPOSED TRANSPORT  
CONFIGURATION #4 WITH 17  
LINE 1.8 METRE GOLDHOFER  
SPLIT PLATFORM TRAILER

**REV**  
2762/D3/112

**A**

2762/D3/112-A SCALE FOR REDUCED PRINTS - 10 mm DIVISIONS



A	ISSUED FOR COMMENT	LT	DATE
REV	No.	BY	DATES

**NOTES**

- IT IS ASSUMED THAT THE HAUL WILL BE UNDERTAKEN WITH COMPETENT AND EXPERIENCED Haul SUPERVISORS FOR THE TYPE OF HAUL OPERATING EQUIPMENT IN GOOD CONDITION, WITHIN ITS DESIGN CAPABILITIES, AND TAKING INTO ACCOUNT THE VARIOUS WEATHER CONDITIONS AT THE TIME. IT IS ALSO ASSUMED THAT THE LOAD BEING TRANSPORTED AND ANY BEAMS OR TRANSPORTERS USED TO SECURE IT HAVE BEEN DESIGNED TO BE ABLE TO BE TRANSPORTED IN THE MANNER PROPOSED, AND THAT THE METHOD OF SECURING THE LOAD IS CAPABLE OF WITHSTANDING ALL STRESS GENERATED DURING TRANSPORTATION. L & A TALBOT SERVICES LTD. CANNOT BE HELD RESPONSIBLE FOR OPERATOR ERROR, INCLUDING BUT NOT LIMITED TO EXCESSIVE SPEED FOR THE CONDITIONS AT THAT POINT IN TIME.

**Hitachi Energy**

**B.L.I.S.**

Telephone: +61 (0)2 95347484  
Fax: +61 (0)2 95314040  
Email: brian.lay@blisgroup.com

**TSL**  
TALBOT SERVICES  
L & A Talbot Services Ltd  
INSTALL 153.5 TONNE TRANSFORMER AT HUME LINK SUBSTATION

**TITLE**  
PROPOSED TRANSPORT CONFIGURATION #5 WITH 18 LINE 1.8 METRE GOLDOVER SPLIT PLATFORM TRAILER

DRAWING No. **2762/D3/113** REV **A**

762/D3/113-A	SCALE FOR REDUCED PRINTS - 10 mm DIVISIONS			Clarix CAD 2.0v3
--------------	--	--	--	------------------

**TARE WEIGHTS**

AXLE POSITION	TARE WEIGHTS	GROSS WEIGHT
6.00	4.10 4.10	3.90 3.90
6.00	4.03 4.03	11.60 11.60
	9.03 9.03	15.50 15.50
		15.50 15.50

**TRANSFORMER - 13.50 TONNES  
CENTRE OF GRAVITY - 4300  
CL GRAVITY - 4300**

**C.L TRAILER SUSPENSION**

**GOOSENECK PLATFORM / TRAILER - 4800 WIDE**

**4800 PUSHBAR**

**12 LINE 1.83 SPACED AXLES AT 1830 SPACING = 20130**

**OUTSIDE TRAILER RADIUS 23150**

**INSIDE TRAILER RADIUS 15500**

**OUTSIDE PRIME MOVER RADIUS 22600**

**TRANSFORMER - 13.50 TONNES CENTRE OF GRAVITY**

**TRAILER CROSS SECTION SCALE - 1:150**

**NOTE: RADII COMPUTED WITH TRAILER WHEELSET AT MAX 45°**

NOTES

- 1) IT IS ASSUMED THAT THE HAUL WILL BE UNDERTAKEN WITH COMPETENT AND SUITABLE PERSONNEL AS APPROPRIATE FOR THE TYPE OF HAUL, OPERATING EQUIPMENT IN GOOD CONDITION, WITHIN DESIGNATED LIMITS OF USEFUL LIFTING INTO ACCOUNT THE ROAD/Traffic WEATHER CONDITIONS AT THE TIME. IT IS ALSO ASSUMED THAT THE LOAD BEING TRANSPORTED HAS BEEN PROPERLY SECURED TO THE SUPPORT FRAMEWORK HAVE BEEN DESIGNED TO BE ABLE TO BE TRANSPORTED IN THE MANNER DESCRIBED HEREIN WITHOUT THE NEED OF EXCESSIVE FORCE GENERATED DURING TRANSPORTATION. YOU CANNOT BE HELD RESPONSIBLE FOR OPERATION ERROR, INCLUDING ALL THE ABOVE, AND ESPECIALLY BUT NOT LIMITED TO, EXCESSIVE SPEED FOR THE CONDITIONS AT THAT POINT IN TIME.

A	ISSUED FOR COMMENT	LT	DATE
REV No.	BY	DATES	

SCALES	DESIGN - B LAY	AUG 22
1:100	DRAWN - LDT	AUG 22
1:200	CHECK -	-

REFERENCE DRAWINGS

Hitachi Energy

B.L.I.S.

Telephone: +61 021 95247484 Fax: +61 021 95314040 Email: brian.lay@blisgroup.com

**TSL TALBOT SERVICES**

2/3 DOLLAH HANGARAWA ROAD NORTH AUCKLAND Phone: (09) 431 1500 Mobile: 021 9 528 271 email: talsupport@aia.co.nz

L & A Talbot Services Ltd

PROJECT INSTALL 13.5 TONNE TRANSFORMER AT HUME LINK SUBSTATION

TITLE PROPOSED TRANSPORT CONFIGURATION #2 ON T2R8 DRAKE & 2R8 DOLLY

DRAWING NO. REV 2762/D3/102 A

2782/D3/102-A SCALE FOR REDUCED PRINTS - 10 mm DIVISIONS

## **APPENDIX M : Transgrid NHVR Permit**

(Place holder Appendix)

## **APPENDIX N : Rev 20 Comment close out**

SNOWY 2.0 TLC PROJECT

Document No(s). HLW-HLJV-PRW-ENM-PLN-000021 - TTMP Rev 20.TC  
Document Title: Traffic and Transport Management Plan  
Date Documents Issued: 30.9.2024  
HLWJV Document Rev. No. 20

TfNSW Review Comments  
Review Date: 21/11/2025  
Reviewer: Ruvimbo Timba  
Review Reference: VS-WST24/00178/011, SF2024/091831  
HLWJV Response  
Response Date: 10/02/2025  
Respondent: HLWJV Response  
Response Reference: TTMP Rev 21

Item	TfNSW Reference	HLWJV Doc Reference	TfNSW Comments / Conditions	HLWJV Response	TfNSW Close Out	Status	Notes	Further Comments	HLWJV Response
1	1		The overall high-risk OSOM vehicle configuration (including height, width, length and weight) will need to be provided in each document in order to ensure that the OSOM vehicles being used are consistent with the approved Route Assessment - Maragle prepared by REX J Andrews dated 17 November 2021	The most recent OSOM Route Study was updated by Deugro in February 2024 and is the subject of the previously approved NHVR Permits. This study replaces the RJA route assessment 1a and 1b data from 17 November 2021. Any new OSOM transport will be subject to the same NHVR Permit Process for review by TfNSW, noting the route study (Deugro, 2024) was for transformer deliveries only. An additional route survey is currently in progress for reactor deliveries to the Maragle substation, however, while it is anticipated the same routes will be used for these deliveries, this cannot be confirmed until the reactor requirements are confirmed by the manufacturer. Please refer to the attachment (Deugro route study) for further details regarding vehicle configuration.					
2	2	Section 9.1	The high-risk OSOM vehicles for Stage 2 require a Transport Management Plan (as detailed in the TfNSW website). A copy of this Transport Management Plan, which corresponds with the supplied NHVR permit (Appendix M), must be included as an appendix in the revision of the TTMP.	The previously approved NHVR permit with an accepted TMP has been included as an appendix in the revised TTMP data attached . Any new OSOM transport will be subject to the same NHVR Permit Process that includes review by TfNSW as a road authority .					
3	3	Appendix L	The bridge assessment in Appendix L is specific to two bridges (Burra Creek and Paddys River) along the OSOM route. However, nine bridges on the route have been identified in Table 9-1 of the TTMP. A full bridge assessment is to be provided within the revised TTMP. It must include all identified bridges on the state road network, demonstrating that the high-risk OSOM load can safely utilise the remaining bridges without additional upgrades.	The NHVR permit process includes a bridge assessment completed internally by all responsible authorities (including TfNSW) to ensure the OSOM load can safely traverse a bridge without additional upgrades. The approved NHVR permit identifies which bridges can be safely traversed by the OSOM load and outlines the measures required for transport over these bridges. The current permits are included in the TTMP under Appendix M. Any new OSOM transport route will be subject to the same NHVR permit process for review by TfNSW and the relevant road authorities. The TTMP will be revised accordingly for any new OSOM transport, including reactor deliveries to the Maragle substation once the finalised route assessment is completed.					
4	4	N/A	As stated, the previous version of the TTMP was not endorsed by TfNSW due to some concerns with concurrent heavy vehicle movements occurring at the Snowy Mountains Highway and Link Road intersection. Protocols are to be provided to ensure that any potential conflict is managed, including but not limited to ensuring only one heavy vehicle turning at any given time.	This matter has been raised by the Proponent (Transgrid) for the Snowy 2.0 Transmission Connection Project for further discussion with NSW DPHI in relation to Stage 1 activities, noting Stage 2 activities are restricted to Project Area West (those areas of the Project situated to the west of the Tumut River) and will not require the use of the Snowy Mountains Highway and Link Road intersection.					
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									




## SNOWY 2.0 TLC PROJECT

Document No(s).	HLW-HLJV-PRW-ENM-PLN-000021 - TTMP Rev 20.TC
Document Title:	Traffic and Transport Management Plan
Date Documents Issued:	30.9.2024
HLWJV Document Rev. No.	20

### SVC Review Comments

**Review Date:** 4/11/2024  
**Reviewer:** Sophie Gairn  
**Review Reference:** VS-P0016465.HLW-UGL-TRM-000989

## HLWJV Response

Response Date:  
Respondent:  
Response Reference: Rev 21

[illegible]

26 March 2025

TfNSW reference: REN25/00008/008; SF2025/004244,

Your reference: SSI-9717; PAE-81444713

Jason Snape

Senior Environmental Advisor

TransGrid

By Email: Jason.snape@transgrid.com.au

### **TfNSW response to the review of the Traffic and Transport Management Plan (rev 0.22 dated 18 March 2025) for Snowy 2.0 Transmission Connection- updated to capture Stage 2- 500Kv substation activities**

Dear Jason,

Reference is made to the Traffic and Transport Management Plan (TTMP) rev 0.22 dated 18 March 2025 prepared by TransGrid.

TfNSW identified within the response to this revision 20 within TfNSW letter dated 6 March 2025, that there were inconsistencies with the high-risk OSOM route analysis presented in the Snowy 2.0 Transmission Line TTMP Revision 20 to the route analysis and ports that were assessed and captured within the EIS for the Snowy 2.0 Transmission Line MCoA.

TfNSW within a meeting with TransGrid on 20 March 2025 discussed the issue of the inconsistency with the high-risk OSOM route analysis provided in the TTMP and the route analysis that formed part of the EIS for the project, both parties agreed that this matter could be resolved within a further update to the TTMP for Snowy 2.0 Transmission Line that must be completed in advance of the commencement of the high-risk OSOM movements for the project.

The revised Snowy 2.0 Transmission Line TTMP revision 0.22 dated 18 March 2025 has been updated to address the points raised by TfNSW as part of the consultation for version 20 of the Snowy 2.0 Transmission Line TTMP dated 26 September 2024.

TfNSW has reviewed Snowy 2.0 Transmission Line-TTMP revision 0.22 dated 18 March 2025 and notes that the changes to this revision are the removal of the high-risk route analysis from the appendix and the inclusion of a commitment by TransGrid in s9.1-Haulage Routes to update the TTMP to include the high-risk OSOM route analysis for the high-risk OSOM deliveries prior to the commencement of the high-risk OSOM movements for the project.

TfNSW advises that the changes within the Snowy 2.0 Transmission Line TTMP revision 0.22 dated 18 March 2025, satisfactorily addresses TfNSW previous letter dated 6 March 2025 that was prepared in response to Snowy 2.0-Transmission Line revision 20 and Condition B32 Traffic and Transport Management Plan of the MCoA, in relation to TfNSW requirements for the state road network, with the exception of the Condition B32(a),(b) and (d)(i) dot point 22 which requires "*a traffic management system for managing over-dimensional vehicles*".

---

#### OFFICIAL

A 51-55 Currajong Street, PARKES NSW 2870 | PO Box 334 PARKES NSW 2870 | DX20256

E [development.renewables@transport.nsw.gov.au](mailto:development.renewables@transport.nsw.gov.au) | ABN 18 804 239 602

P 1300 207 783

[transport.nsw.gov.au](http://transport.nsw.gov.au)

TfNSW requests DPHI to conditionally approve the Snowy 2.0 Transmission Line-TTMP rev 0.22 for Stage 2 based on the commitment by TransGrid to update the TTMP for Snowy 2.0 Transmission Line to address the requirements of Condition B32(a),(b) and (d)(i) dot point 22 of the MCoA, in relation to the inclusions of the high-risk OSOM route analysis and assessing any inconsistencies with the routes or dimensions and weights of the laden high-risk OSOM from the current high-risk OSOM route analysis that forms part of the EIS. TfNSW must be consulted as a part of the update and revisions to the TTMP for Snowy 2.0 Transmission Line prior to approval of the update to the TTMP by DPHI.

The six month suggested timeframe is to allow for a sufficient lead time prior to movements to obtain any further environmental approvals and to complete any road upgrades that are necessary to facilitate the high-risk OSOM movements on the state road network, that may be required because of a change of routes or changes to the high-risk OSOM laden vehicle configurations and weights, as a result of revisions or updates to the current high-risk OSOM route analysis that forms part of the EIS for the project.

If you have any questions, please contact Alexandra Power- Team Leader Development Services-Renewables, on 1300 019 680 or email [development.renewables@transport.nsw.gov.au](mailto:development.renewables@transport.nsw.gov.au)

Yours faithfully,

A handwritten signature in black ink, appearing to read "Alexandra Power".

**Alexandra Power**

Team Leader Development Services-Renewables  
Transport Planning  
Planning, Integration and Passenger

---

OFFICIAL

A 51-55 Currajong Street, PARKES NSW 2870 | PO Box 334 PARKES NSW 2870 | DX20256  
E [development.renewables@transport.nsw.gov.au](mailto:development.renewables@transport.nsw.gov.au) | ABN 18 804 239 602  
P 1300 207 783  
[transport.nsw.gov.au](http://transport.nsw.gov.au)