HEALTH & SAFETY MANAGEMENT PLAN

Prepared for:
Hunter Power Project
Construction & Commissioning Package

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Plan Approval

Approval	Name	Position	Signature (can be digital)	Date
Approved by:	Bart Robertson	HSSE Manager		06/02/2025
Endorsed by:	Daniel Ellul	Project Director		06/02/2025

Document Revision History

Version	Section(s)	Description of Amendments	Amended By	Date
A	All	Developed for ITT Draft Submission	Anthony Richards – National HSE Operations Manager	19/11/2021
B	All	Error reference words removed, and links amended throughout the document.	Anthony Richards – National HSE Operations Manager	09/12/2021
C	All	Updated to meet SHL compliance requirements	Anthony Richards – National HSE Operations Manager	28/01/2022
0	2.3, 3.3.1, 13.1.9, 13.1.10	2.3 – Independent auditor section added 3.3.1 – Key personnel names added 3.3.2 – Site supervision and HSE support 13.1.9 – Reporting included 13.1.10 – Communication barriers addressed	Anthony Richards – National HSE Operations Manager	23/03/2022
1	7.1, 7.2, 7.3, 7.3.1, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 7.10 15	7.1 Updated table 10 with new CRC information. 7.2 Updated to meet UGL CRC - Falls & Dropped Objects. 7.3 Updated to meet UGL CRC – Operation of Mobile Plant. 7.3.1 – “Insert” reference words removed and detail added. 7.4 Updated to meet UGL CRC – Confined Space Entry. 7.5 Updated to meet UGL CRC – Excavation & Trenching 7.6 Updated to meet UGL CRC – Mobile Cranes & Lifting Equipment 7.7 Updated to meet UGL CRC – Hazardous Energy 7.8 Updated to meet UGL CRC – Electrical Work 7.9 Updated to meet UGL CRC – Light & Heavy Vehicle Operations 7.10 Updated to meet UGL CRC – Removed Hazardous Chemicals (Including Dangerous Goods) 15. “Insert” reference words removed and detail added.	Danny Dewberry – HSE Manager	26/04/2022
2	1.6	1.6 Added incidents are preventable and that the health,	Danny Dewberry - HSE Manager	03/06/2022

		safety welfare and convenience of all employees. 2.1 Added reference to stakeholders 3.3.2 Added HSE Support locality 5.2.1 Added joint understanding of capability Added reference to Emergency Services notification Added ongoing consultation with Emergency Services 7.1.1 Removed "Reference Error" 7.3 Removed duplicated numbers 7 & 9 Table 11 Unchecked demolition box Magnetic fields – added link to Design Management Plan Added Magnetic Field information 10 Added Damstra Management System 10.2 Added written or plain and simple language Added UGL Induction Points 13 Added Safety resolution information 13.1.8 Added the use of International Symbols Added Project Central (UGL SharePoint) 13.1.10 Added the use of Japanese Interpreter supplied by SHL 16 Added Subcontractor adherence to WHS Law 16.1 Added UGL to ensure employees and Subcontractors comply with relevant Australian Standards		
3	Plan Approval 3.31 5.1 1.6, 12 12 Appendix 1 Appendix 6	Updated Project Manager details Updated Table 6: Site Leadership Personnel to include new Project Manager Updated Table 7: Incident notifications to include new Project Manager Changed Contractor Handbook to Contractor HSEQ Requirements Updated hyperlink to Contractor HSEQ Requirements Changed Contractor Handbook to Contractor HSEQ Requirements Changed heading to Contractor Handbook to Contractor HSEQ Requirements	Danny Dewberry - HSE Manager	10/11/2022
4	3.31 2.6.1	Updated Project Manager details	Danny Dewberry - HSE Manager	12/05/2023

	5.1 Appendix 3	Removed COVID Vaccination requirements Updated Table 7: Incident notifications to include new Project Manager and SHL Contact Updated Appendix 3 – Appointed Roles		
5	1.2 1.3.1 2.7 3.3.1 5.1 Appendix 3 Various 13.1.6 2.5 Link to other plans 5.1.2 8	Updated project completion dates Updated maps for better picture clarity Updated Table 5: HSE CRSC target Updated Table 6: Site Leadership Personnel Updated Table 7: Contact Details, added clarification to minor incident reporting timeframes. Updated Appendix 3 – Appointed Roles Project Manager replaced throughout document with Project Director Pre-Start Meeting added to Communication and Consultation HPP-SHL-CMG-CG-GEN-PLN-0001 HPP Commissioning Management Plan referenced in link to other plans. Update to 4 and 5 severity incidents, templates required. Covid reference removed as corporate document has been removed	David Sowter – Snr HSE Advisor Bart Robertson – HSE Manager Sean Riddiford – Construction Manager	05/07/2024
6	3.3.1 13 12 Appendix 3	Update to new Project Director Update to Communication and Consultation-Issue Resolution Process Update to Contractor Mobilisations Update Authorised Persons matrix.	Bart Robertson – HSE Manager	
7	5.1.3 1.2 2.2 5.2.1 6.1.1 6.6 8.1.1 8.1.2 8.1.3 13	To include onsite paramedics - first responder requirements. Update to Project Description Include the Manifest in Emergency Response Planning Risk register. HAZOB Update to the Security requirements for site. Chemical Management Transport and Logistics Change Management	Bart Robertson – HSE Manager	

Contents

1 INTRODUCTION

This Health & Safety Management Plan (HSMP) defines the management of Health and Safety on all activities undertaken by UGL associated with the development of the **Hunter Power Station Project (the project).**

1.1 PURPOSE

UGL has a legal and moral obligation to manage the health and safety of all workers and the public interface associated with work being performed by the Project. This will be achieved by implementing the UGL safe system of work. This HSMP:

a. Explains the content, structure and relationship with other systems used by the UGL Project Team

b. Establishes how UGL will maintain a safe workplace in compliance with Legislation

c. Outlines the project risk profile, core function and work activities

d. Sets performance objectives and targets

e. Promotes the implementation of the One HSE Culture Framework.

This HSMP provides a high-level structure on how UGL will manage workplace health and safety systematically across all project work activities. It is structured so that it can be used as a system implementation tool to ensure compliance with the UGL Health and Safety System on the project.

For the purposes of this plan, health and safety management system means the UGL health and safety management system.

This HSMP does not reference in detail all the requirements outlined in procedures, guidance material, templates, or tools for implementation. Implementation of specific procedural requirements must be sourced from the UGL Management System (UGLMS).

The project undertaken by UGL will develop a specific Risk Register for the scope and risk profile.

1.2 PROJECT DESCRIPTION

The Hunter Power Project (Facility) is expected to have a nominal capacity of approximately 660 megawatts (MW) (under ISO conditions) and will be generated via two heavy-duty 'F Class' open cycle gas turbines (OCGT). The OCGT units are expected to be commercially operational in the second half of 2025.

The Facility includes a new 132 kV electrical switchyard. The Facility will connect into the existing 132 kV electricity transmission infrastructure located near the Site and is anticipated to be fully operational by the end of 2024. The connecting electrical switchyard will eventually be owned and operated by the Network Service Provider (NSP) (Ausgrid).

The gas turbines will primarily be fired on natural gas with the use of distillate fuel as a backup. The necessary infrastructure required for the turbines to operate on natural gas fuel, principally a new gas lateral pipeline connecting to the Jemena Gas Network Northern Trunk and a gas compression station, is the subject of a major investment being undertaken by Snowy Hydro Limited (SHL) in parallel to the power station. This gas infrastructure investment facilitates the power station's capability to operate using natural gas.

The turbines are capable of operating on distillate fuel as necessary and this functionality will be incorporated into the Facility. Operation on distillate fuel is considered a backup function in the case that gas supply to the Site is not available, for a short period during the commissioning of the power station and provides the necessary risk management function for the provision of System Restart Services (SRS).

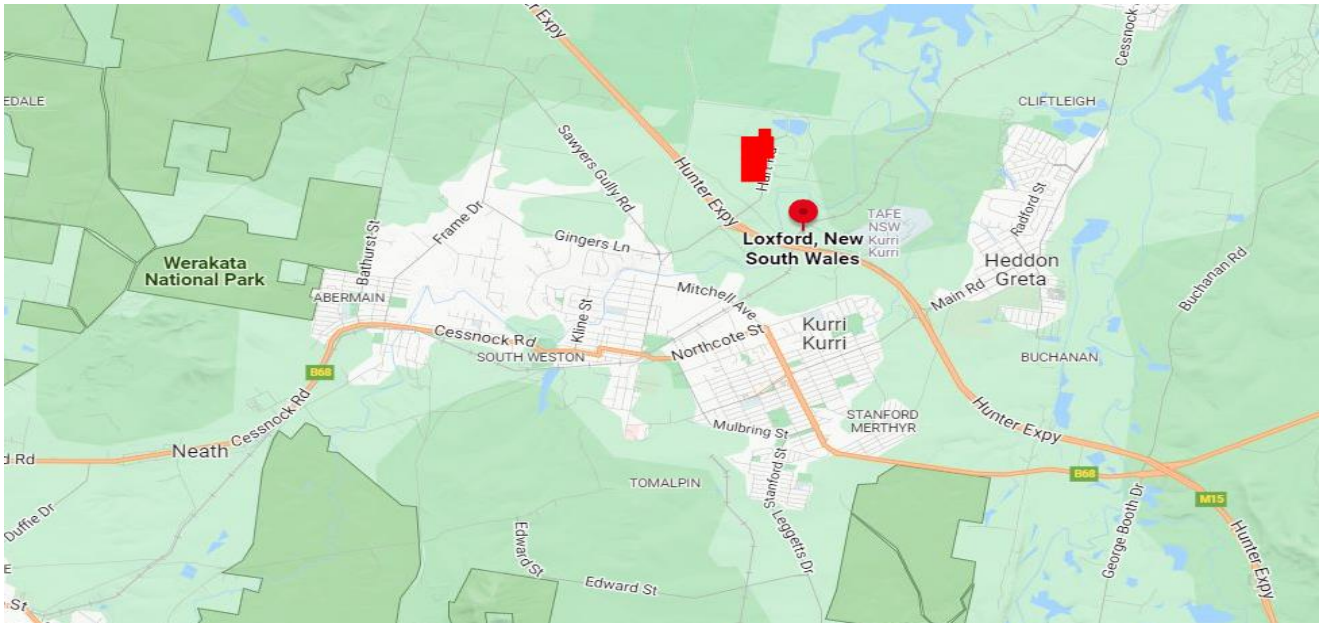
The Facility will be fully automated, with operations, control and monitoring able to be monitored and controlled from Snowy Hydro's Control Centre in Cooma, NSW.

1.3 LOCATION AND EXISTING ENVIRONMENT

1.3.1 Location

The Site is located in the small suburb of Loxford in the Hunter Valley region of New South Wales, approximately three km north of the town of Kurri Kurri, approximately 35 km west of Newcastle and 125 km north of Sydney. The Site is the former Hydro Aluminium Kurri Kurri Pty Ltd (***Hydro***) aluminium smelter. Access into the Site will be via the aluminium smelter's Hart Road entry.

Figure 1: Proposed site location



1.3.2 Prior use and suitability

The smelter was closed in 2014. Since the closure, extensive remediation works have taken place, including removal of all existing structures from the Site, except for a transformer yard and offices. The Hydro land including the site is being remediated for industrial use.

Figure 2: Proposed development location

1.4 SCOPE OF WORK

1.4.1 Description of UGL's Scope of Works and Responsibilities

As the Main Works Construction (MWC) contractor, UGL's scope of works and responsibilities are broadly described below, which includes, but is not limited to all Site construction and erection works for the Facility at the Site within the Terminal Points, including:

- Civil works package
- Procurement of Balance of Plant (BOP) items within UGL's scope of works as identified in the DOW (Division of Works) document and as per the final contract documents. The list of all the BOP items within UGL's scope will be provided by the Lead Designer along with all necessary engineering information, procurement specifications, performance specifications etc.
- Supply of BOP equipment and materials to site, logistics including handling, offloading and proper storage of all Plant and Materials associated with construction of the Facility within the terminal points and as covered by the Main Works Contract scope.
- Construction and erection of the Employer's design
- Construction and erection of the Power Island equipment under the technical supervision of the Power Island Supplier
- Site assembly, installation and other construction activities as required for the facility within UGL's scope of works and within the facility's terminal points.
- Pre-commissioning and cold commissioning of the facility within the terminal points
- Provision of experienced labour to support hot commissioning. However, the hot commissioning including the performance testing, reliability runs etc will be carried out by others.
- Full control of the site including Principal Contractor responsibilities under NSW WH&S Laws
- Full project management of the construction services in compliance with the relevant project approvals and construction approvals
- Mobilisation and demobilisation and provision of all enabling services including utility supplies to facilitate the facility construction within the terminal points and within the agreed scope of works.
- Provision of all labour and supervision, equipment, and plant to construct and erect the facility construction within the terminal points.
- Provision of all relevant information related to the works.
- Attaining the relevant works approvals for the scope of works within the main works contract.

1.5 ABBREVIATIONS, ACRONYMS & DEFINITIONS

The following table lists the acronyms used in this plan, including their definitions.

Table 1: Abbreviations, Acronyms & Definitions

Term	Definition
BOP	Balance of Plant
DOW	Division of Works
ISO	International Organisation for Standardisation
MW	Megawatt
MWC	Main Works Contractor
NEM	National Electricity Market
NSP	National Service Provider
OCGT	Open Cycle Gas Turbine
SHL	Snowy Hydro Limited (Client)

SRS	System Restart Service
the Project	Hunter Power Project
WH&S	Workplace Health & Safety
UGLMS	UGL Management System

1.6 THE WAY WE OPERATE

'The Way We Operate' is an overall process that guides how UGL manages our business to meet Snowy Hydro and other stakeholder requirements including subcontractors and interfaces with other Principal Contractor companies. It fosters an integrated approach across all project functions to deliver outcomes that ensure third party certifications in relation to Australian and International Standards for health and safety are maintained. UGL will ensure to integrate the Snowy Hydro health and safety requirements on the project.

- This Health and Safety Management Plan shall be read in Conjunction with the UGL Contractor HSEQ Requirements (Appendix 6) and Snowy Hydro's Health, Safety and Environment Management Plan. If there is a discrepancy between the two systems, the higher-level control will apply.
- UGL will work collaboratively with Snowy Hydro to achieve a best for project safe approach. This will be demonstrated through:
- Supporting Snowy Hydro safety audits, inspections, and reviews of the works
- Involving Snowy Hydro in risk workshops and incident investigations
- Supporting project wide initiatives and campaigns.
- Supporting interactions with SafeWork NSW.

UGL is committed to ensuring the project is completely aligned with Snowy Hydro values including the belief that all incidents are preventable and that the health, safety welfare and convenience of all employees, subcontractors, visitors, public community members and any others in proximity to the works is paramount. Our priority is to identify all safety, construction, access, transportation, interface and other project scope delivery risks. From the executive level right through to every worker on the ground, the focus is centred on a strong safety culture applied to every level of the project, from design, through to equipment transportation, installation, testing and commissioning.

1.7 UGL'S MANAGEMENT SYSTEM

UGL is the Principal Contractor for carrying out all construction works forming part of the works under the contract and the UGL Management System will apply to all workers, subcontractors, and consultants. UGL is authorised to have management or control of those workplaces necessary to discharge its duties as Principal Contractor.

UGL's Management System (UGLMS) will be used for the delivery of the project and will ensure we achieve safe and efficient delivery of our requirements under the Contract, as well as our overall business objectives.

The UGLMS integrates several elements which operationalise 'The Way We Operate' processes to achieve a fully integrated, systematic, planned, and consistent approach to delivering work. These elements are detailed in the table below.

Table 2: Document Type Definitions

Element	Description
Policy	A statement of strategic intent, commitment and includes minimum requirements
Procedure	Describes the steps to be undertaken to complete an activity, the accountable roles and the tools and knowledge to be used
Work Instruction & Safe Work Procedures	Provides detailed instructions on how to conduct a step within a Procedure

Tools	Preformatted documents (forms and templates) used to collect specific data or information for a particular purpose
Knowledge	Reference material to provide context or guidance to a Policy or Procedure
Business Applications	Software tools used to manage our business and operations

1.7.1 Synergy

The CIMIC wide event and audit management database (utilising Enablon software) is key to managing hazard identification, action tracking, trend analysis, incident investigation and performance reporting. Through the innovative use of mobile phones apps, Synergy is accessed for critical risk conversations, workplace inspections, immediate hazard management and audits.

1.8 WORK HEALTH & SAFETY LAWS

For the purposes of this plan, Work Health and Safety Laws means the:

- Work Health and Safety Act 2011 (NSW)
- Work Health and Safety Regulations 2017 (NSW)
- Heavy Vehicle (Vehicle Standards) National Regulation
- Including any codes of practice and any other laws relevant to health and safety within the state of NSW.

2 SCOPE OF HEALTH AND SAFETY MANAGEMENT PLAN

This HSMP has been developed from UGL's Health and Safety Policy, Procedures and other components of the HSEQ Management System as detailed in the UGL Management System.

This HSMP has been developed in conjunction with relevant project specifications, drawings, contract conditions, and has been developed to comply with the requirements of AS/NZS 4801, ISO45001 and the Federal Safety Commissioner's (FSC) Australian Government Building and Construction Occupational Health and Safety Accreditation scheme and relevant safety legislative frameworks.

This plan has also been developed to achieve the requirements of the following Snowy Hydro requirements:

- Snowy Hydro Health & Safety Management Plan
- Snowy Hydro Employer's Requirements – Project Execution
- Snowy Hydro Employer's Requirements – Technical
- Snowy Hydro Life Saving Rules
- Snowy Hydro Invitation to Tender (ITT).

This Plan is also intended to meet the requirements of the relevant legislative frameworks that require the development and implementation of a HSMP.

2.1 WHO IS COVERED?

This HSMP applies to the Snowy Hydro Hunter Power Project and all workers and stakeholders (including contractors / subcontractors) undertaking works within the project.

2.1.1 Interfaces with other Principal Contractors

Where work is to be conducted by UGL in an area managed by another Principal Contractor, UGL will comply with the governing Principal Contractors HSMP, so long as the standard required is equal or above the standard required by UGL's health and safety management system. Interface agreements will be developed between UGL and other Principal Contractors. All interface work will require combined risk workshops, scheduled review meetings and where required permits to work.

Where there is a whole of project shared process for example, emergency response and evacuation, UGL will ensure those processes are incorporated in the relevant project plans, inductions, and workforce communication.

2.1.2 Employers Role – Snowy Hydro

UGL will support Snowy Hydro in meeting their due diligence obligations to ensure the project they have appointed UGL as Principal Contractor is being managed in accordance with Legislation, the contract and this Health and Safety management plan. Throughout this Health and Safety management plan, detail is provided on how UGL will collaboratively work with Snowy Hydro in planning work and assessing risk, engaging with stakeholders, undertaking assurance activities and notifying, conducting and reporting incident investigations, training and workforce consultation and interactions with SafeWork NSW.

2.2 REVIEW OF HSMP

At a minimum, the HSMP shall be reviewed, and if necessary amended, every 12 months and when any of the following occurs:

- A Workplace Health and Safety Incident (where the definition of a Workplace Health and Safety Incident is as per the Conditions of Contract)
- Practical Completion of a significant part of the Works
- A significant change in Site conditions
  - Introduction of Energised Systems and Plant. (132kv, Fuel and Gas)
  - Construction into Commissioning
- A change in the applicable Workplace Health and Safety Laws
- Whenever any major Subcontractor starts work on Site; or
- A request by Snowy Hydro to do so.
- Independent Audit

2.2.1 Amendments

Where the HSMP has been amended, UGL shall:

- In the event of a material amendment, re-submit the documentation to Snowy Hydro, for Review; or
- In the event of any other amendment, notify Snowy Hydro and, upon request by Snowy Hydro, re-submit the documentation to Snowy Hydro (displaying amendments in tracked changes).

UGL shall ensure that the HSMP is maintained and resubmitted as necessary to Snowy Hydro until the date of Completion of the Works.

2.3 INDEPENDENT AUDIT OF HSMP

In complying with Snowy Hydro Employers Requirements, UGL will ensure an independent audit of the HSMP is undertaken prior to submitting to Snowy Hydro, 3 months after implementation and every 12 months after the implementation audit.

2.4 PROJECT DETAILS

Table 3: Project Details

Client:	Snowy Hydro
Project address(s) / approximate location:	The Site is located in the small suburb of Loxford in the Hunter Valley region of New South Wales, approximately three km north of the town of Kurri Kurri, approximately 35 km west of Newcastle and 125 km north of Sydney. The Site is the former Hydro Aluminium Kurri Kurri Pty Ltd (Hydro) aluminium smelter. Access into the Site will be via the aluminium smelters Hart Road entry.

Interfaces with other parties (requiring interface agreements)	Other Principal Contractors and Snowy Hydro Operations.

2.5 MANAGEMENT PLANS

This Plan must be read in conjunction with the following management plans:

Table 4: Project Management Plans

Item	Document Number	Management Plan Name
1	3200-0663-HPP-PM-PLN-001	Project Execution Plan
2	3200-0663-HPP-PM-PLN-002	Community Engagement Management Plan
3	3200-0663-HPP-PM-PLN-003	Procurement Management Plan
4	3200-0663-HPP-PM-PLN-004	Health & Safety Management Plan
5	3200-0663-HPP-PM-PLN-005	Subcontractor Management Plan
6	3200-0663-HPP-PM-PLN-006	Traffic Management Plan
7	3200-0663-HPP-PM-PLN-007	Industrial Relations Management Plan
8	3200-0663-HPP-PM-PLN-008	Risk Management Plan
9	3200-0663-HPP-PM-PLN-009	Construction Management Plan
10	3200-0663-HPP-PM-PLN-010	Transport & Logistics Management Plan
11	3200-0663-HPP-PM-PLN-011	Construction Environmental Management Plan
12	3200-0663-HPP-PM-PLN-012	Australian Industry Plan
13	3200-0663-HPP-PM-PLN-013	Local Participation Plan
14	3200-0663-HPP-PM-PLN-014	Commissioning Management Plan
15	3200-0663-HPP-PM-PLN-015	Project Controls Management Plan
16	3200-0663-HPP-PM-PLN-016	Quality Management Plan
17	3200-0663-HPP-PM-PLN-017	Security Management Plan
18	3200-0663-HPP-PM-PLN-018	Information Management Plan
19	3200-0663-HPP-PM-PLN-019	Human Resources Management Plan
20	3200-0663-HPP-PM-PLN-020	Operational Readiness
21	3200-0663-HPP-PM-PLN-021	Design Management Plan
22	3200-0663-HPP-PM-PLN-022	Compliance Management Plan
23	3200-0663-HPP-PM-PLN-023	Bushfire Management Plan
24	3200-0663-HPP-PM-PLN-024	Emergency Response Plan
25	3200-0663-HPP-PM-PLN-025	Communication Management Plan
26	3200-0663-HPP-PM-PLN-026	Pollution Incident Reporting Management Plan
27	HPP-SHL-CMG-CG-GEN-PLN-0001	HPP Commissioning Management Plan

2.6 PRINCIPAL CONTRACTOR

For the purposes of the Work Health and Safety Laws, unless otherwise agreed, the following is applicable:

- UGL is the Principal Contractor for carrying out all construction works forming part of the works under the contract.
- UGL is authorised to have management or control of those workplaces necessary to discharge its duties as Principal Contractor

- UGL will ensure that all workplaces in respect of which UGL has been authorised to have management or control are secured from unauthorised access and, in doing so, have regard to all relevant matters including risks to health and safety arising from unauthorised access, the likelihood of unauthorised access occurring and, to the extent that unauthorised access to the workplace cannot be prevented, how to isolate hazards within the workplace.

2.7 OBJECTIVES AND TARGETS

Details of objectives and targets for this project include:

Table 5: Project Objects & Targets

Leading Indicators				
KPI	**Measurement**		**Target**	**Stretch**
Senior Leadership Field Visits	Senior Leadership Facility Visits – Managers and above - 1 per every 6 months		2	3
Critical Risk Safety Conversation	Conversations conducted by	Project Director (per month)	2	3
		Site Supervisor (per month)	6	8
		Site Engineer (per visit)	2	3
		HSE (per month)	8	9
Audit and Inspection	Check it planner compliance		85%	100%
Subcontractor H&S Management	On-board, complete subcontractor review, process compliance.		100%	100%
Emergency Response	Site Emergency Response Drills conducted 28 days post mobilisation and then at < 180-day intervals.		1	2
PMR	Proactive Monitoring Ratio (inspections + safety conversations) *10/# personnel		85%	95%
Action Closeout	Effective closeout of actions identified through audit and assurance activities. Actions closed on time.		90%	100%
Severity 1 Events	No Severity 1 events		0	0

3 ROLES AND RESPONSIBILITIES

3.1 SENIOR LEADERSHIP

- Govern health and safety management across the UGL
- Authorise the UGL health and safety policy
- Support a proactive approach to the management of health and safety on the project
- Ensure the effectiveness of health and safety management on all project work activities
- Ensure that health and safety responsibilities are defined and appropriately and competently resourced
- Ensure health and safety risks are identified and managed in accordance with this plan
- Ensure the risk management framework is thoroughly implemented through each phase of project planning
- Ensure the UGL fulfils their duty to workers and stakeholders
- Provide assurance that health and safety systems and compliance strategies are in place and effective
- Lead the UGL in the implementation of the One HSE Cultural Framework by consistently displaying behaviours aligned to the One HSE Culture Framework for Managers.

3.2 PROJECT DIRECTORS AND SUPERVISORS

- Ensure workers are made aware of their health and safety responsibilities

- Fulfil the requirements of the UGL risk management processes and consult workers when identifying, assessing and applying controls to hazards
- Ensure consultation arrangements are in place
- Ensure workers are provided with appropriate resources, training and education in the UGL safety management system
- Ensure the conditions at the workplace are monitored and take action for the purpose of preventing incidents
- Demonstrate behaviours aligned to the One HSE Culture Framework for Managers and Supervisors.

3.3 UGL EMPLOYEES AND SUBCONTRACTORS

- Take reasonable care of their own and others' health and safety at UGL workplaces
- Comply with the UGL safe systems of work
- Actively support and participate in health and safety consultation and other activities (including training)
- Assist managers and supervisors in applying appropriate safety measures
- Report hazards, incidents and opportunities for health and safety improvement
- Demonstrate behaviours aligned to the One HSE Culture Framework including follow the project rules.

3.3.1 Project Leadership Details

Table 6: Site Leadership Personnel

Name	Role	Contact
Daniel Ellul	Project Director	Daniel.Ellul@Ugllimited.com
Sean Riddiford	Construction Director	Sean.Riddiford@Ugllimited.com
Bart Robertson	HSSE Manager	Bart.Robertson@Ugllimited.com

General roles and responsibilities for UGL employees are contained within the following:

- HSEQ Procedures
- Position Descriptions.

Project Specific Roles and Responsibilities as per the table are detailed in **Appendix 1 – 'Responsibilities'** of this Plan.

3.3.2 UGL Supervision and HSE Support

UGL will ensure that adequate and appropriate workforce supervision and HSE support for supervisors and the workforce are provided at all times for the project in accordance with Section 6.4 of Safe Work Australia's Construction Work Code of Practice.

UGL HSE Support will be located proximate to the works.

4 LEADERSHIP, CULTURE AND BEHAVIOURS

The One HSE Culture framework guides our behaviours and defines what each person on the project can do to build and maintain a culture that increases understanding and participation across four theme areas.

Figure 3: OneHSE Culture Framework

THEME	EVERYONE	SUPERVISORS	MANAGERS
Risk management	Understand hazards	Promote risk awareness	Challenge and improve
Standards	Follow rules	Positively reinforce	Set high standards
Communication	Speak up	Encourage the team	Maintain openness
Involvement	Get involved	Involve the team	Provide support

Each of our themes have supporting behaviours, the 'everyone' behaviours apply to all people regardless of their role. In addition, employees in leadership roles should also demonstrate the 'supervisor' or 'manager' behaviours.

For additional information, refer to the following:

- One HSE Culture Overview poster
- One HSE Culture Themes poster
- One HSE Culture Everyone Behaviours poster
- One HSE Culture Supervisors Behaviours poster
- One HSE Culture Managers Behaviours poster

4.1 UGL'S HEALTH & SAFETY POLICY

UGL's Health and Safety Policy, details our top-level commitment to Health and Safety, and sets the tone for how we operate. A copy of the policy is provided in **Appendix 2 – 'Health & Safety Policy'.**

4.2 IMPLEMENTATION OF ONE HSE CULTURE FRAMEWORK

For this Project, the One HSE Culture Framework will be rolled out through:

- Inductions – to communicate expected behaviours to staff, subcontractors and workforce
- Audits and reviews – to identify and close gaps in our existing culture
- Leadership programs – to build and reinforce the skills needed to achieve our desired culture
- Reward and recognition programs – to recognise people or projects that are demonstrating positive behaviours and contributing to achieving excellence
- Incident reviews – to ensure the behavioural aspects of our incidents are captured and addressed.

The health and safety team on the project will be advocates for the ONE HSE Culture. Their role will include coaching and mentoring of the workforce, supervisors and project leaders to ensure positive safety outcomes for the project. The ONE HSE Culture will form the framework for observations, incident investigations, work planning and infield coaching and mentoring.

5 INCIDENT AND EMERGENCY MANAGEMENT

5.1 INCIDENT MANAGEMENT

HSE incidents and near miss events must be immediately notified to the relevant levels of supervision or management in person or via phone.

In addition to immediate notification to a line manager or supervisor, the following notifications must occur for the event types detailed below:

Table 7: Incident notifications

Notification by	Notification to	Contact Details	Event Type 1* Timeframes	Event Type 2* Timeframes
Project Team	Aligned offsite PD / Operations Manager	Daniel Ellul	ASAP	
	LoB GM	John Greaves	ASAP	
	LoB HSE Operations Manager	Kris Hewitt (Reverts to Mark Blackmore if vacant)	ASAP	
	Snowy Hydro Project Director	Darryl Young	ASAP	
LoB GM or delegate	Divisional EGM Projects	Craig Nuttall	ASAP	<24Hrs
LoB HSE Operations Manager	Divisional HSE GM Projects	Mark Blackmore	ASAP	<24Hrs
Divisional EGM	UGL Managing Director	Doug Moss	<1Hr	<24Hrs
Divisional HSE GM Operations	Group GM HSE Legal (if regulatory notifiable or legal privilege needs to be discussed)	Tony Vaile Stephen Barrett-White	<1Hr	<24Hrs
***Event Type 1**	*Actual or Potential Death or Permanent Disability Event* *Actual, or Potential Environmental discharges, environmental pollution or degradation which has high severity impacts on the community and/or environment, or may have irreversible detrimental long-term impacts*			
***Event Type 2**	*Actual or Potential Lost Time Injury, Medical Treatment Injury, or Restricted work injury.* *Environmental discharges, environmental pollution or degradation which has moderate severity impacts on the community and/or environment (1 to 3 months) but is fully reversible in the long term*			

All Contractors shall immediately inform UGL of any lost time injury or significant near miss, notifiable incidents involving its workers, its sub-subcontractors, or members of the public. All other minor incidents must be reported to UGL as soon as practicable within 24 hours.

5.1.1 Notification to Snowy Hydro

The UGL Project Director shall as soon as practicable but within 12 hours either verbally or in writing notify Snowy Hydro of:

- All Incidents including near hits.

- Environmental damage
- Notifiable events to a regulatory body
- Receipt of a notice from a regulatory body
- Any investigation or enforcement action by a Regulatory body
- This is to be followed with a written summary containing the following:
    - Date and Location
    - Activity being undertaken at the time
    - Result of the event
    - Any injuries to workers or potential harm
    - Details of any environmental damage
    - Workers involved, including witnesses
    - Immediate actions including preventative actions.

5.1.2 Incident reporting and Investigations

Incidents must be reported and investigated in accordance with UGL's Incident Management – Reporting and Investigation Procedure.

For this project, the Incident Reporting System is Synergy.

The UGL Project Director shall be responsible for coordinating the initial investigation. The HSE Professional or Supervisor will assist the Project Director as and when required. The final investigation will detail the event, the causes and/or contributing factors and any necessary corrective actions required to prevent reoccurrence. Once completed the investigation shall be uploaded into the Synergy event reporting system along with the corrective actions.

Corrective actions raised in incident investigations must be reviewed by the Project Director or HSE Professional post implementation to verify their onsite implementation and effectiveness. The reviews should also consider any risks that have been created or emerged through the implementation of the corrective actions, and any further action needed to mitigate those risks included in the project risk register. The review must be scheduled in Synergy within twenty-eight days (28) and any follow-up actions recorded.

For additional information refer to **Incident's, Injuries and Emergencies on the UGLMS** and the following key documents:

- Provide details of any client/site specific Procedures/requirements for Incident Management
- UGL Incident Management Procedure (UGLMS-131-331)
- Detailed Investigation Template (UGLMS-4-950) - Sev 1-3 Events
- Short Form Investigation Template (UGLMS-4-954) - Severity 4 & 5 No template required. Can use Short Form - Incident Investigation Template if warranted.

5.1.3 Injury Management

Events that cause injury will be initially treated on site by the Baseline Paramedic and any injury requiring the involvement of allied health professionals (injuries beyond first aid) must be communicated to UGL's injury management team.

The process for injury management is detailed in UGL's Injury Management Procedure (UGLMS-131-340)

5.2 EMERGENCY MANAGEMENT

For this project, a separate emergency management plan has been developed, and provides details of the emergency scenarios, training requirements and response plans. HPP Emergency Response Plan (HPP-UGL-PMT-GN-GEN-PLN-0024)

As a minimum, the risks identified in s7 – 'Critical Risk Management' of this Plan must be reviewed for emergency response requirements as part of the Project Risk Assessment Process.

For additional information refer to Incident's, Injuries and Emergencies on the UGLMS, and the following key documents:

- Emergency Planning Procedure (UGLMS-131-337)

5.2.1 Emergency Response Planning

UGL will:

- Implement and maintain a documented process to identify potential HSE emergency situations for the project and work activities undertaken by the Project.
- Ensure the Emergency Response Plan and procedures are regularly reviewed for identified emergency situations for all packages of work.
- Ensure the Scheduled 11 Hazardous Chemical Manifest is monitored and reviewed regularly to ensure updated information is available for the Emergency Services.
- Ensure emergency response arrangements are communicated to all personnel and visitors.
- Ensure emergency response arrangements and a joint understanding of capability are established through consultation with the local emergency service organisations (including but not limited to NSW Police, VRA, Fire and Ambulance Services).
- Ensure a notification process is established whereby emergency service organisations receive no less than two weeks notification of anticipated potential disruptions to emergency services travel routes, road closures and the like.
- Ensure a process for ongoing consultation between UGL and emergency service organisations regarding the works.

5.2.2 Emergency Response Training

UGL will ensure designated ECO personnel which have:

- Been inducted in the site-specific emergency plans and procedures; and
- Have obtained any qualification or formal training defined by UGL as required to fulfil the role.

UGL will ensure emergency drills:

- Are scheduled and carried out on site at least every 6 months.
- Are scenario based and test a variety of the identified potential emergency situations?
- Are recorded and evaluated for effectiveness.
- Incorporate a process for the identification and management of corrective actions.

5.2.3 Emergency Response Equipment

UGL will:

- Ensure a qualified person undertakes a first aid risk assessment to identify site first aid equipment and requirements in accordance with the relevant legislation, codes of practice and Australian Standards
- Ensure the Site Baseline Paramedics maintain adequate response capabilities and resources to fulfill the first responder role.
- Specialised Emergency Response Equipment is supplied during an emergency event by external emergency services.
- Ensure a competent person identifies site emergency response equipment and requirements.
- Ensure there is a process for annual inspecting, testing and maintaining emergency and first aid equipment.

5.2.4 Bushfire Management

The project has identified that bushfire is a key risk to the project and neighbouring community. Therefore, a standalone bushfire management plan has been developed. Please refer to TC-15703-HPP-PM-PLN-023 Bushfire Management plan. This plan outlines the requirements for both prevention and emergency response

6 RISK MANAGEMENT

There are four phases to safety risk management in the lifecycle of a construction project:

- Phase 1 – Planning including Safety in Design Snowy Completed
- Phase 2 – Pre-Construction and mobilisation readiness
- Phase 3 – Construction and commissioning
- Phase 4 – Operational Readiness and Close out (Handover and demobilisation)

UGL's Risk Management Procedure details our approach to HSE Risk Management that must be applied on all UGL Projects/Sites. This includes details of:

- UGL's HSE Risk Management Methodology
- UGL's HSE Risk Management Tools, including our approach to Task Based Risk Assessments (SWMS)
- Minimum Training expectations for the completion of Risk Management activities.

6.1.1 Project Risk Register

A Project Risk Register will be developed and maintained in accordance with the Utilities Risk Register Development Guideline. It will provide details of the minimum control expectations that need to be implemented on the project. It will not be generic, but rather linked to the project work schedule focussed on the planning of specific tasks. As a minimum, the Risk Assessment must address the risks identified in s7 – 'Critical Risk Management' and s8 – 'Other Safety Risks' in this plan.

The project risk register will be reviewed:

- Prior to project mobilisation
- Prior to the commencement of construction work as per the project schedule
- When there is a change in construction work phase in accordance with the schedule e.g transition from civil to mechanical scope.
- A Workplace Health and Safety Incident (where the definition of a Workplace Health and Safety Incident is as per the Conditions of Contract)
- Practical Completion of a significant part of the Works
- A significant change in Site conditions
  - Introduction of Energised Systems and Plant. (132kv, Fuel and Gas)
  - Construction into Commissioning
- A change in the applicable Workplace Health and Safety Laws
- Whenever any major Subcontractor starts work on Site; or
- A request by Snowy Hydro to do so.

6.2 SAFETY IN DESIGN (SID)

UGL will implement a safety in design (SID) program for managing project scope activities. The program will identify potential infrastructure users and document the safe design criteria in accordance with the following principles:

Table 8: Design Principles

Principle	Description

Principle 1	Persons with control—those who make decisions affecting the design of products, facilities or processes can promote health and safety at the source.
Principle 2	Product lifecycle—safe design applies to every stage in the lifecycle from conception through to disposal. It involves eliminating hazards or minimising risks as early in the lifecycle as possible
Principle 3	Systematic risk management—apply hazard identification, risk assessment and risk control processes to achieve safe design.
Principle 4	Safe design knowledge and capability—should be either demonstrated or acquired by those who control design
Principle 5	Information transfer—effective communication and documentation of design and risk control information amongst everyone involved in the phases of the lifecycle is essential for the safe design approach

As part of the design process, the CHAIR (Construction Hazard and Implication Review) methodology has been implemented, including consideration of the applicable critical risks detailed s7 – 'Critical Risk Management' of this plan.

For additional information refer to Safety in Design on the UGLMS,

6.3 HIERARCHY OF CONTROLS

UGL will use the hierarchy of controls in managing hazards and risk. The Project will be able to demonstrate that risks are eliminated so far as is reasonably practicable and if it is not reasonably practicable to eliminate risk then controls to minimise those risks so far as is reasonably practicable will be implemented. The hierarchy of controls are as follows:

Table 9: Hierarchy of Controls

Control	Responsibilities
1. Elimination	Elimination of hazards is often more achievable at the design or work planning stages. It may not be possible to eliminate a hazard if doing so means that you cannot deliver the service or product. If you cannot eliminate the hazard, then eliminate as many of the risks associated with the hazard as possible.
2. Substitution	Involves replacing a hazard or work practice with a safer option.
3. Isolation	Involves physically separating the source of harm from people by distance or using barriers.
4. Engineering	An engineering control is normally physical in nature, including a mechanical device or process.
5. Administration	Administrative controls are work methods or procedures that are designed to minimise exposure to a hazard. Other examples include signage and training.
6. PPE	Personal Protective Equipment (PPE) is the least effective option because of the reliance upon human behaviour and supervision e.g. people may not wear the PPE or may not wear it effectively. Wearing PPE does not remove or reduce the hazard.

When risks cannot be eliminated, evidence will be available that demonstrates how a risk-based decision to minimise the risk rather than eliminate it has been decided. There will be levels of authorisation established to approve work where residual risk remains.

6.4 SAFE WORK METHOD STATEMENTS

UGL and/or its Subcontractors will develop Safe Work Method Statements (SWMS) for their works being carried out on the project to ensure that residual risks and mitigation strategies identified in the Project Safety Risk register are transferred and implemented and that task specific hazards are identified and controlled.

UGL shall only be required to develop a SWMS for activities defined as High-Risk Construction Work per the legislation, however in lieu of a SWMS, UGL shall develop a risk assessment that outlines how safety hazards and associated risk will be controlled during the delivery of its scope.

SWMS shall be developed in consultation with the relevant stakeholders which can include Managers, subcontractors, workers and safety personnel. The consultation process may include, but not be limited to, SWMS workshops, pre-start meetings and inductions.

The Supervisor must ensure the SWMS is:

- Specific to the works being undertaken and the location
- Developed in consultation with workers (including contractors) conducting the activity, or their representative
- Reviewed against the Site HSE Risk Register and Site HSMP (This Document)
- Identifying the control measures with a clear link between hazards and their risk
- Written in a manner that is easily understood by the persons who use it. Note, pictures or diagrams may be an effective way of communicating information.

All Subcontractors shall submit Safe Work Method Statements (SWMS) prior to commencement of the activity for all work being undertaken on the project. This shall be reviewed as per this section of this document.
UGL will review SWMS in a timely manner and provide feedback which may include the acceptance or rejection of the SWMS and the reasons for the findings.

If the SWMS does not meet UGL's requirements, UGL's shall notify the Subcontractor who shall revise and resubmit the SWMS prior to commencement of site works. Rejected SWMS must have the identified deficiencies addressed and signed off by the reviewer.

Notwithstanding any other provisions of the subcontractor's contract, the Subcontractor will not be permitted to commence the work activity associated with the SWMS until UGL has acknowledged in writing to the Subcontractor that the SWMS meets requirements by completing a SWMS Review Checklist.
When UGL is satisfied that the Subcontractor's SWMS addresses all requirements, the Subcontractor shall demonstrate to UGL's satisfaction that all the SWMS controls are properly implemented and verified. A copy of the subcontractor's SWMS shall be readily available on the site.

The submitted SWMS may form the basis by which the Sub-Contractor's WHS performance will be monitored and audited on site by UGL.
Material which may assist with developing the SWMS includes:

- UGL's Critical Risk Control Protocols requirements
- Work or task methodology documentation
- Other supporting risk assessment documentation, such as plant & equipment risk assessment, rigging and lifting studies, hazardous substances risk assessments, asbestos management plans
- Previous SWMS
- Statutory Requirements including legislation such as regulations, codes of practice etc.

Communication and emergency response processes will be documented for personnel in a remote or isolated location or conducting work at night and shall document the risk and controls in a specific SWMS, approved by the Project Director.

UGL Workers are considered competent to lead a SWMS review through to approval. SWMS reviews will be completed using the SWMS Review Checklist.

All UGL SWMS for critical risk activities and high-risk construction activities shall be approved by the supervisor.

6.4.1 SWMS / Change Management

As part of the ongoing risk management strategy and performance review, UGL and Subcontractors shall review SWMS. Reviews can be scheduled, or can be triggered under any of the following situations:

- Where the WHS Risk register is changed during a review process or scope change
- Where a change in legislation occurs
- Whenever changes in engineering work methods are required
- Where additional hazards are identified by the work team or another party
- Where the work activity is stopped for a period and is recommenced
- Where an incident occurs during the execution of the specific work activity.

Where this is triggered by change identified on the job, the:

- SWMS will be marked up or a UTake5 completed and attached that identifies the change
- Site Supervisor or delegate shall ensure that all workers involved in the activity are informed of the changes.

Scheduled reviews shall be:

- Scheduled in Checkit planner
- conducted by either by the Project Director, Supervisor and or HSE Professional
- Recorded using the SWMS review checklist.

Where an amendment is made to the SWMS that is identified as a permanent change, the revision of the SWMS shall be updated by UGL or UGL Subcontractors and all applicable personnel re-inducted into the SWMS and amended SWMS recorded.

6.5 UTAKE5 PERSONAL RISK ASSESSMENTS

The Utake5 is a personal or team risk assessment designed to assist an individual or crew and shall be utilised by all personnel on the project to:

- Identify any changes to the work or environment
- Identify new hazards
- Confirms they have the necessary skills, authorisations, equipment and information to perform the work safely.

A Utake5 shall also be undertaken in any of the following situations:

- If it is an individual's first time performing a task
- When environmental or work conditions have changed since the last time the individual performed this task
- If an individual feels uncertain about a task.

UTake5 hazard assessments shall utilised by all workers on the project. A UTake5 is not designed to replace SWMS but to act as a personal situational risk assessment in supplement to the SWMS for given tasks.

Where the UTake 5 tool reveals that identified hazards are such that part or parts of the work process will need to be changed, the SWMS must be reviewed to add those identified changes made and all relevant workers to read, understand and sign off on the revised SWMS. Supervisor must also approve.

6.6 HAZOB

The HAZOB program is designed to enable personnel to report new hazards or risks to Supervisors so that they can be controlled in a timely manner.

If any person observes a hazard, they should attempt to resolve the hazard, if it is safe to do so. If the person raising the hazard cannot resolve the issue, they must discuss the hazard with their supervisor and discuss what controls can be put in place (short term and long term if required) and report it using the HazOb booklets.

All hazards identified through the HazOb process that are unable to be controlled prior to completion of shift must be entered into the UGL event management database, including the planned actions with appropriate times frames based on the risk rating.

For additional information refer to HSEQ Risk Management on the UGLMS, and the following key documents:

7 CRITICAL RISK MANAGEMENT

7.1 OVERVIEW

For this project, the following critical risks apply:

Table 10: Project Specific Critical Risks

☒	Falls & Dropped Objects	☒	Operation of Mobile Plant	☒	Confined Space Entry
☒	Excavation & Trenching	☒	Mobile Cranes & Lifting Equipment	☒	Hazardous Energy
☒	Electrical Work	☐	Operation of Rolling Stock	☐	Working in the Rail Corridor
☒	Light & Heavy Vehicle Operations				

7.1.1 Critical Risk Control Exemptions

If the Project/Site is unable to meet one or more requirements from the Critical Risk Controls, a Critical Risk Control exemption must be completed and approved. Details of critical risk exemptions that apply to this Project/Site are detailed in 'Appendix 4 – Exemptions' of this Plan.

Exemptions must be approved in accordance with UGL's HSEQ Delegation of Authority (UGLMS-5-1112). A copy is provided as 'Appendix 5 – HSEQ Delegation of Authority'.

7.1.2 Assessment against Client/Other Requirements

Where UGL is working on a site that is controlled by other parties, and there is a requirement to operate under their health and safety processes, a gap analysis must be completed against the Critical Control detailed below. Variances must be identified in each of the sections that apply below.

7.1.3 Snowy Hydro Life Saving Rules

At a minimum, these life-saving Rules will apply for the duration of the Project:

- Rule 1: Always wear your seat belt on all equipment where fitted.
- Rule 2: Always ensure effective controls are in place where you could fall 1.8 metres or more.
- Rule 3: Always prove equipment and plant is de-energised prior to commencing work.
- Rule 4: Always ensure effective controls are in place to prevent impact from falling objects.
- Rule 5: Always ensure effective controls are in place when undertaking excavation and penetration work.
- Rule 6: Never attend work while under the influence of drugs or alcohol.
- Rule 7: Never enter a confined space unless you have a valid confined space entry permit.
- Rule 8: Never place yourself under a suspended load or lift a load over any person.

- Rule 9: Never operate plant and equipment unless competent and/or authorised.
- Rule 10: Never handle your mobile device while driving a vehicle or while operating mobile equipment.

UGL shall comply and shall ensure all employees and subcontractors comply with the life-saving Rules.

A breach of a lifesaving rule will be treated as an incident.

7.2 FALLS & DROPPED OBJECTS

Controls to manage the risks associated with work at height must as a minimum achieve the Critical Controls detailed below.

Critical Risk Controls for Falls & Dropped Objects

1. Work involving a risk of fall injury must be assessed in Site/Project Risk Assessments, detailing the minimum controls to be implemented in accordance with the Fall Control Hierarchy.
2. Fall risk activities must be planned and approved with a Fall Risk Permit supported by a SWMS and Emergency Rescue Plan.
3. Everyone undertaking or supervising work with a fall risk is trained and competent to understand fall hazards and controls.
4. Scaffolding must only be used if it is complete and certified for use with an in-date scaffold tag.
5. MEWPs must be fitted with secondary guarding/protection devices.
6. Height access equipment including harnesses and lanyards must be visually inspected by users before each use to check for signs of wear and tear and in-date tagging.
7. Hand tools used at height must have a connection point for lanyards
8. Ground conditions are assessed and verified as solid, stable and suitable for MEWP operations.
9. Rated anchor points must be installed and maintained for the attachment of fall restraint and fall arrest systems. Temporary anchor points can only be selected by an engineer and installed by a height safety specialist or rigger.
10. Objects must be prevented from falling through openings, penetrations and shafts in work platforms by:
    - mesh screening, drop matts or other methods to prevent objects from falling, and
    - exclusion zones covering the full credible drop radius.
11. Exclusion zones must be controlled using warning signs and barriers.
12. Access to exclusion zones is prohibited unless positive communication with the person in control of the work area results in approval to enter.
13. Where work methods require detaching and reattaching at height, a dual lanyard system is utilised to ensure that at least one connection point is maintained at all times (100% Hook-up).
14. During movement of MEWPs, spotters are mandatory to enforce exclusion zones and monitor encroachment into hazardous areas.
15. Spotters must be competent to lower the MEWP to ground level in emergencies.
16. Hand tools used while working at height have secondary securing mechanisms such as lanyards.
17. Loose materials used at height that may fall must be contained or restrained where practicable.
18. Hard hats must be worn where there is a risk of being struck by falling objects and must be secured by a chin strap/lanyard where the hard hat could become a dropped object hazard.

NOTE: If there is a requirement to hire an EWP that can't meet UGL's requirements for secondary guarding, an exemption must be obtained

Additional controls to manage Work at Height are detailed in the UGL/Client Procedures detailed below, and the Project Risk Assessment and relevant SWMS for this Project.

For additional information refer to Falls and Dropped Objects on the UGLMS, and the following key documents:

7.2.1 Scaffold

The requirements for construction and dismantling of Scaffold on this project will be completed in accordance with UGL's Scaffolding and Temporary Works Procedure.

For additional information, refer to the following:

- Scaffolding Procedure (UGLMS-131-385)

7.2.2 Elevated Work Platforms (MEWPs)

Mobile EWPs used on this project must be fitted with Secondary Protection to prevent Crush or Shear injuries. If there is a requirement to hire a MEWP that can't meet this requirement, an exemption must be obtained.

For additional information, refer to the following:

- Elevated Work Platforms (MEWPs) Procedure (UGLMS-131-384)

7.3 OPERATION OF MOBILE PLANT

Controls to manage the risks associated with the operation of mobile plant must as a minimum achieve the Critical Controls detailed below.

Critical Risk Controls for Operation of Mobile Plant

1. Powered mobile plant must only be selected and used for its designed purpose within its safe operating limits.
2. Operators of powered mobile plant must hold required competencies and relevant licences for the plant item.
3. Powered mobile plant must be checked to verify safe for operation and safety devices fitted and functioning during:
   - Pre-use authorisation inspection on arrival; and
   - Pre-start inspections.
4. Movement of mobile plant and vehicles on site must comply with site traffic management plans or have designated travel routes defined for them.
5. Loading/unloading exclusion zones (LUEZ) are clearly delineated with controls to prevent unauthorised access.
6. Powered mobile plant is prevented from breaching minimum safe approach distances from overhead electrical lines by either:
   - Height or proximity limiting devices wherever possible; and
   - Electrical spotters and warning signs and markers.
7. Unauthorised access to plant operating zones must be prevented using signage and physical barriers where practicable, and/or physical distance to separate pedestrians (workers and public) from powered mobile plant.
8. To enter a plant operating zone workers must make positive contact with the operator via two-way radio or hand signals and eye contact.
9. Authorised workers within the plant operating zone must remain in the operator's line of sight and be able to maintain two-way communication via radio or hand signals.
10. Any changes to the Traffic Management Plan must be communicated.
11. Mobile Plant and vehicle operators always find a stationary position in a safe place before handling a mobile phone.
12. Braking mechanisms are applied before mobile plant is left unoccupied.

Additional controls to manage Operation of Mobile Plant are detailed in the UGL/Client Procedures detailed below, and the Project Risk Assessment and relevant SWMS for this Project.

For additional information refer to Mobile Plant on the UGLMS, and the following key documents:

7.3.1 Plant Pre-use Authorisation (Plant Induction)

Before powered plant is used on site, it must be endorsed for use, using the applicable Pre-use Authorisation Form, or the General Template if a plant specific tool is not available.

Outcomes for the Plant Pre-use Authorisation Process are recorded in Damstra system.

Plant awaiting authorisation must be placed in the designated laydown area until authorised by Logistics Supervisor.

Plant that has been authorised for use on this site will be identified using Plant induction stickers.

7.3.2 Prohibited Items

Due to previous UGL and broader industry experience, the following items have been deemed prohibited for use by UGL's workforce.

- Prohibited Items List (UGLMS-131-588)
- In addition, the following Snowy Hydro prohibited items list will apply:
- Asbestos or asbestos-containing materials (as defined in AS 4964). Should asbestos be discovered, the Contractor shall have it properly removed and disposed of by a qualified contractor. An asbestos register shall be developed by the Contractor if any asbestos is discovered at site.
- Lead-based paints
- Isocyanates
- Naturally occurring aggregates for use in reinforced concrete and/or naturally occurring aggregates for use in concrete that do not comply with the Standards
- Cast iron for any oil service
- PCBs
- Chlorofluorocarbons (CFCs) or other ozone-depleting substances except (with Employer's consent in writing) in applications where their use cannot reasonably be avoided, and is generally accepted for the specific application
- Carcinogenic materials (including hydrazine)
- Toxic inhalation hazard chemicals except (with Employer's consent in writing) in applications where their use cannot reasonably be avoided, and is generally accepted for the specific application
- Per- and poly-fluoroalkyl substances (PFAS) eg. in firefighting foam
- Cadmium plated nuts and bolts; and
- Any other materials generally known in the industry to be deleterious to health if used.

If an activity can't be completed without the use of one of these prohibited items, an exemption request must be completed in accordance with UGL's Document and Records Management Procedure.

7.4 CONFINED SPACE ENTRY

Controls to manage confined space entry must as a minimum achieve the Critical Controls detailed below.

Critical Risk Controls for Confined Space Entry

1. Work in a confined space is only allowed where there is no alternative to complete the work outside the confined space.
2. Confined Space work must be authorised with a Confined Space Permit supported by a SWMS and Emergency Rescue Plan.
3. Personnel involved in confined space work have attained applicable training and competency for:
   - Working in a confined space
   - Atmospheric monitoring of confined space
   - Issuing confined space permits.
4. Hazardous energy sources within the confined space must be identified and confirmed isolated or rendered safe before entry.

5. An assessment of potential atmospheric contaminants in/around the confined space must be completed using calibrated equipment to determine atmospheric monitoring requirements that must be implemented during entry.
6. Ventilation requirements to maintain a safe atmosphere for work within a confined space must be implemented before entry.
7. An emergency rescue plan must be prepared before entry including identification of required rescue equipment and competencies required by rescuers.
8. Equipment and products used in confined spaces or potential confined spaces (e.g. trenches and open tanks) must be assessed and managed to prevent risks of:
    - suffocation from atmospheric contaminants
    - explosion
    - fire.
9. Confined spaces must be made safe for entry by:
    - purging of atmospheric contaminants
    - set up of required atmospheric monitoring equipment
    - verifying the isolation and zero energy state of all existing hazardous energy sources
    - establishing an effective means of two-way communication with confined space entrants and a method for raising an emergency
    - verifying all other controls stipulated in the permit are in place.
10. During work in a confined space unauthorised entry is prevented by appropriate means such as standby persons, warning signs and barricades.
11. A dedicated standby person/sentry is located outside the confined space whenever someone is working inside the confined space. The standby person must not enter the confined space and must not have any other duties.
12. If there is a risk of atmospheric hazards during work in a confined space ongoing monitoring of atmosphere is required.

In addition to the Critical Controls detailed above, the following Client/Site Specific requirements apply for the management of Confined Space Entry on this Project:

- **For additional information refer to Confined Space on the UGLMS, and the following key documents:**

7.5 EXCAVATION & TRENCHING

Controls to manage breaking ground must as a minimum achieve the Critical Controls detailed below.

Critical Risk Controls for Excavation and Trenching (breaking ground)

1. Work within and around excavations >300mm is controlled through an Excavation Permit and supported by a SWMS.
2. Service strikes must be prevented during excavation and trenching greater than 300mm by:
    - positive identification of all underground services by a competent person using service locator tools and equipment
    - potholing where the exact service location cannot be determined
    - isolation of services wherever possible
    - use of visual markers and/or protective barriers to identify exposed services.
3. The risk of trench/excavation collapse must be assessed by a competent person to determine ground support requirements.
4. Ground support must be implemented for depths >1.5m unless a geotechnical report states it is not necessary.
5. Shoring systems must be designed and approved for use by a competent engineer.
6. Personnel involved in excavations are trained and competent to understand the hazards and controls specific to the task and enact emergency management plan requirements.
7. Equipment to visually locate underground services must include:
    - non-destructive digging equipment; and
    - insulated hand tools.
8. Excavations >1.5m must be hard barricaded.

9. For excavations >1.5m, powered mobile plant, vehicles and spoil must be kept a minimum of 2m from an excavation edge, unless ground support is designed to allow closer approach.
10. Where a hazardous atmosphere is present or likely to be present, excavations are considered a confined space and confined space controls must be implemented.
11. A dedicated safety observer must be in place when excavating within 1m of a live service.

For additional information refer to **Excavation and Trenching on the UGLMS**, and the following key documents:

7.6 MOBILE CRANES AND LIFTING EQUIPMENT

Controls to manage Mobile Cranes and Lifting Equipment must as a minimum achieve the Critical Controls detailed below.

Critical Risk Controls for Mobile Cranes and Lifting Operations

1. All lifting operations must have a supporting task specific SWMS and a lift study for significant lifts.
2. Before commencement of any lift the crane operator must verify that loads are within the Safe Working Load (SWL).
3. Ground conditions are assessed by a competent person before all lifts
4. Crane operators and persons slinging loads must be competent to operate the plant and equipment to complete the tasks they are undertaking, including holding relevant categories of high-risk work licences.
5. Cranes must be checked to verify safe for operation and safety devices fitted and functioning during:
   - Pre-use authorisation inspection on arrival; and
   - Pre-start inspections.
6. Lifting gear is periodically inspected and tagged by a competent person and visually inspected by users before use.
7. Cranes must be fitted with load limiting and indicator devices.
8. Non-slewing mobile cranes / articulated pick and carry cranes must be fitted with Dynamic Load Moment Indicator (DLMI) Systems.
9. Exclusion zones must be established for the full credible drop radius and slewing zones of a lift.
10. Unauthorised access to exclusion zones by persons not directly involved in the lift must be controlled using warning signs and hard barriers (where practicable) or temporary delineation devices.
11. Authorised persons within an exclusion zone must not position any part of their body under a suspended load.
12. Pick and carry crane movements must be managed by a spotter to clear or prevent entry of unauthorised persons to the travel path of the load.
13. Agreed communication protocols must be used by lifting team members to control the lift.
14. Outriggers, where installed, must be deployed.
15. Non-conductive tag lines of a suitable length to prevent entanglement are to be used to control travelling loads.
16. Wind speeds must be measured before commencing lifting operations.

Additional Requirements for Articulated Pick and Carry Cranes

Articulated pick and carry cranes must be:

- Fitted with a Dynamic Load Moment Indicator
- Capable of having their use data downloaded, to verify operating within design parameters.

NOTE: If there is a requirement to hire an articulated pick and carry crane that can't meet this requirement, an exemption must be obtained.

For additional information refer to Mobile Cranes and Lifting Equipment on the UGLMS, and the following key documents:

NOTE: Lift Studies must be approved by a competent and appointed crane coordinator. The Crane Coordinator(s) for this project are detailed in **Appendix 3 - 'Appointed Roles'** of this Plan.

7.7 HAZARDOUS ENERGY

Controls to manage work with/near sources of hazardous energy must as a minimum achieve the Critical Controls detailed below.

Critical Risk Controls for Hazardous Energy

1. All hazardous energy sources are identified, de-energised and physically isolated prior to working on the equipment/system.
2. All energy isolations and de-isolations must be completed by a competent person.
3. Physical isolation, de-isolation and any isolation changes must be communicated to affected workers and stakeholders.
4. Work on isolated equipment and systems, except for personal isolations, must be controlled by a permit approved by an Authorised Isolation Officer (AIO).
5. Each person performing work under energy isolation must be competent to understand the permit they are operating under.
6. All new equipment and systems with a hazardous energy source must have lockable isolation points labelled with a unique identifier.
7. All existing equipment and systems with a hazardous energy source must have isolation points labelled with a unique identifier.
8. Before permits are approved, the AIO must verify plant/equipment/systems have been isolated by a competent person and that correct isolation points have been isolated.
9. Testing must be completed to verify that the correct services, plant or equipment are de-energised, (e.g. Zero Energy State).
10. Before working under an isolation each individual will place their personal danger tag and lock on the isolation point or group isolation device.

For additional information refer to Hazardous Energy on the UGLMS, and the following key documents:

NOTE: Isolation Permits must be authorised by an Authorised Isolation Officer. For this Project/Site, the Authorised Isolation Officers are detailed in 'Appendix 3 – Appointed Roles' of this Plan.

7.8 ELECTRICAL WORK

Controls to manage work with electricity must as a minimum achieve the Critical Controls detailed below.

Critical Risk Controls for Electrical Work

1. Live electrical work, other than testing, or proving dead, is prohibited unless approved by exemption.
2. Work on LV and HV electrical equipment must only be carried out by an authorised electrical worker (i.e. electricians, installers, instrument technicians, communication technicians) working under their required competencies and relevant licences in accordance with electrical and safety regulations.
3. An arc flash study is required when working on/near a high-risk electrical circuit to determine the arc flash boundary and PPE requirements.
4. Live electrical circuits are identified and isolated where possible before penetrating surfaces (walls, flooring and roofing).
5. All electrical equipment (including test leads) must be inspected for damage before use.
6. All portable electrical equipment must be tested and tagged.
7. All non-portable electrical equipment not protected by Residual Current Devices must be regularly inspected and tested by a competent person in accordance with Original Equipment Manufacturers (OEM) requirements or at least every 3 years.
8. Residual Current Devices are required for:
   - high risk fixed electrical equipment / installations
   - all tools connected to power circuits.
9. Temporary electrical works are installed, tested and certified in accordance with the applicable standard.
10. When working near Overhead Live Equipment (OHLE) regulated safe working distances/ exclusion zones are identified and maintained.
11. When working near live low voltage equipment, barriers shall be installed to prevent inadvertent contact and the requirements of the Arc Flash Study implemented when required.
12. All temporary electrical leads must be protected from water immersion and damage.

For additional information refer to Electrical Work on the UGLMS, and the following key documents:

7.9 LIGHT & HEAVY VEHICLE OPERATIONS

Controls to manage light and heavy vehicle operations must as a minimum achieve the Critical Controls detailed below.

Critical Risk Controls for Light & Heavy Vehicle Operations

1. Work-related travel must be undertaken in vehicles with 4 or more wheels.
2. Heavy vehicle drivers are appropriately licensed to the class of heavy vehicle being driven.
3. A journey management plan approved by an immediate supervisor is required for light vehicle trips exceeding 4 hours continuous driving.
4. Compliance to HVNL must be verified including controls for risks associated with Speed, Fatigue/Fitness for Work, Load Restraint and Management, and Vehicle Roadworthiness.
5. UGL drivers of heavy vehicles or combinations that exceed 12T must not operate the vehicle outside the prescribed standard hours and must comply with rest requirements.
6. UGL workers who are working as part of the supply chain must, as a minimum, receive base level Chain of Responsibility training.
7. Accurate load information must be provided to Heavy Vehicle transport operators including mass, dimensions and any available load restraint information.
8. Falls risks associated with vehicle loading and unloading activities must be assessed and managed, including consideration for how load restraints and loads will be removed.
9. Heavy Vehicles must be fitted with In-Vehicle Monitoring Systems (IVMS)
10. Vehicles fitted with IVMS must be monitored to provide prompt feedback to drivers not conforming with road regulations and safe driving practices.
11. Over centre load binders must not be used for load restraint.
12. Loading/unloading exclusion zones (LUEZ) are clearly delineated with controls to prevent unauthorised access.
13. All vehicle loads must be restrained to prevent load movement during transit.
14. Drivers must be fit for work, including free from:
    - alcohol and illicit drugs
    - medication impacting on your ability to operate a vehicle
    - effects of fatigue.

For additional information refer to Light & Heavy Vehicle Operations on the UGLMS, and the following key documents:

Load / Unload Exclusion Zones (LUEZ)

- For this Project, dedicated LUEZ will be established during site mobilisation
- LUEZ on this project will be identified through Barricading and signage.

7.9.1 Heavy Vehicle Management (Including Chain of Responsibility)

For this project, heavy vehicles will be used to transport materials, plant and equipment.

Where relevant, Heavy Vehicle requirements have been assessed as part of the Project Risk Assessment, including UGL's ability to influence on road heavy vehicle risks associated with Speed, Fatigue, Loads and dimensions, and Vehicle Roadworthiness.

The Loading Manager for this project is detailed in **Appendix 3 – 'Appointed Roles'** of this Plan.

For additional information refer to Driver and Vehicle (including CoR) on the UGLMS, and the following key documents:

8 OTHER SAFETY RISKS

In addition to the Critical Risks identified for this project, the following Health and Safety Risks have also been identified as relevant to the project scope of works:

Table 11: Identified Project Specific Health & Safety Risks

Applicable	Hazard/Risk	Scheduled Activities / Links to UGL Requirements
☒	Hot Work	Key areas/activities where this could be applicable: • Applicable Site/Client Specific Processes/Requirements • Link to UGL's Hot Work Requirements
☒	Manual Tasks & Ergonomics	• Link to UGL's Manual Tasks & Ergonomics Requirements
☒	Fit for Work	• Link to UGL's Fit for Work Requirements
☒	Fatigue Management	• Link to UGL's Fatigue Management Requirements
☒	Biological Hazards	• Link to UGL's Biological Hazards Requirements
☒	Travel safety	• Link to UGL's Travel safety Requirements
☒	Noise Management	• Link to UGL's Noise Management Requirements
☒	Safe use of hand tools	• Link to UGL's Safe use of hand tools Requirements
☐	Demolition	•
☒	Magnetic Fields	• Refer 3200-0663-HPP-PM-PLN-021 Design Management Plan

NOTE: Where the hazards/risks detailed above are applicable to the Site/Project, the Project Risk Assessment must be updated to reflect the applicable scheduled activities, and how they are being controlled.

Electric and Magnetic Field Risk during Construction

Magnetic field and electric field during construction is expected to be very low to negligible. In most cases the highest EMF is found at HV equipment such as transformers, reactors and at the boundary from the incoming and outgoing transmission lines. However, since it is green field there will be no high voltage until the site is commissioned and energised. For this reason, there is no significant source of exposure.

The personal's working shall adhere to the engineering standards for the compliance with reference levels for the exposure to EMF.

A full EMF report will be produced by SHL design to confirm the acceptance limit for the energised power plant.

8.1.1 Site Security and Public Safety Management.

Security for the site is maintained 24 hours a day, this includes but is not limited to.

- Access control at all entry points by qualified Security personnel
- Perimeter inspections by qualified security personnel during the day
- Perimeter inspections by qualified security dog handlers with security dogs during the night.
- Video surveillance of the site

For further information please refer to **3200-0663-HPP-PM-PLN-017 Security Management Plan**. Public Safety Management is included in UGL's Security Management Plan.

8.1.2 Chemical Management

Chemicals used, handled, generated, or stored on the project will be managed following Hazardous Chemicals Management Procedure GLMS-131-377.

A register of hazardous chemicals shall be maintained through the ChemWatch system. Safety Data Sheets (SDS) will be obtained from the supplier of each hazardous chemical and registered within ChemWatch. This will include international products that will be assessed for the equivalent Australian Safety Data Sheet.

A manifest of Schedule 11 hazardous chemicals will be maintained. Placards for Schedule 11 hazardous chemical will be displayed and maintained if specified quantities are exceeded, at the entrance of the project and at the storage location.

8.1.3 Transport and Logistics

UGL has a Management Plan in place to manage the core process around Transport & Logistics Management, the Plan (TLMP) outlines UGL's approach to providing safe and well-guided logistics solutions that ensures efficient movement of resources and materials for the development of the Hunter Power Station Project (the Project).

The Plan covers but is not limited to:

- Off-Site Vehicle Movements
- Oversize / Overmass Transport
- Materials Management

9 DRUGS AND ALCOHOL

For this project, UGL has implemented the requirements of the UGL Drug and Alcohol Procedure without further need for a Project Specific Drug and Alcohol Management Plan.

UGL's Procedure details:

- UGL Drug & Alcohol Framework
- Drug and Alcohol Management Requirements
- Testing arrangement, procedures, limits and results
- Education, Training and Awareness
- Authorised Testers
- Further Considerations.

For additional information refer to Drugs, Drugs, Alcohol and Fatigue (Impairment) on the UGLMS

10 TRAINING AND COMPETENCY

UGL requires that persons undertaking works on its projects are suitably competent, qualified and licensed where required.

Training and competency requirements for this project are managed in accordance with Training and Competency Procedure (UGLMS-131-357) and the following:

- Training Matrix Template (UGLMS-4-1538)
- Minimum Competency Requirements
- Damstra Workforce Management Software

Worker Competency Minimum Requirements are detailed in UGL's Procedures, and in legislated high risk licensing frameworks.

A summary of minimum competency requirements that apply to this project is detailed in the UGL Worker Competency Minimum Standard Guide UGLMS-5-987

In addition to Legislated minimum competency requirements, UGL requires that people completing certain tasks or roles are assessed and deemed competent through a verification of Competency Process. Training and competency refresher periods will be subject to the project risk assessment. As a minimum the refresher period will be 24 months.

The management of competencies for this project will be completed in accordance with the following:

- Utilities Verification of Competency Procedure (UGLMS-131-569)

10.1 APPOINTED ROLES

UGL's Procedures to manage certain high-risk tasks/activities require the appointment of a competent person to oversee/verify that UGL's requirements are being met, eg. Crane Coordinators to review Lift Plans.
For this project, the appointed roles are detailed in **Appendix 3 – 'Appointed Roles'** of this plan.

10.2 SITE INDUCTIONS

All workers must attend Site Induction prior to commencing work on site. As a minimum, site induction must be written in plain and simple language and include the minimum content detailed in UGL's Training and Competency Procedure (UGLMS-131-357).

11 PURCHASING AND PROCUREMENT

UGL must ensure that HSE requirements are considered when purchasing/procuring products or services for use on this project.

Assessments of products must ensure fitness for purpose including safety requirements that have the potential to impact on:

- Use of the product
- Storage of the product
- Disposal / decommissioning of the product.

Further, where UGL engages in a services contract, the procurement processes must take into consideration:

- The health and safety of persons providing the service
- The health and safety of persons affected by the service.

The engagement of vendors for this project must be pre-qualified for use through Felix (CIMIC's Vendor Management Platform)

For additional information refer to Requisition to Pay on the UGLMS, and the following key documents:

12 CONTRACTOR/SUBCONTRACTOR MANAGEMENT

Contractors / subcontractors must comply with all aspects of the UGL safety management system including all training and competency requirements, PPE standards, plant and equipment standards, Critical Risk Control Protocol requisites and site rules.
The following requirements apply to this project:

- Contractors/subcontractors must be pre-qualified through Felix before being engaged
- Contracts issued to Contractors/Subcontractors must require compliance with UGL's Critical Controls, the requirements of this plan, and any client contractual requirements
- Where specialised contractors are required to use elements of their own health and safety management system to undertake work, UGL must demonstrate that a thorough review and approval process has been undertaken. A standard lower than that of the UGL health and safety management system must not be approved
- UGL will ensure that all health and safety system information including the project risk register, HSMP, Contractor HSEQ Requirements and procedures required to perform UGL work scope is provided to the sub-contractor as part of the request for tender process and included in the contract

- UGL will ensure that sub-contractors will provide a formal pre-mobilisation HSE risk assessment before commencing their scope of work . The risk assessment will be required to be reviewed by responsible UGL representative and communicated to project interfacing workgroups.
- UGL will ensure that sub-contractors supply trained and competent personnel, fit for purpose and maintained equipment and experienced supervision to ensure risk controls and procedures are complied with. UGL will do this by reviewing competency records and ensuring that appropriate evidence of competency is documented and maintained by the Project for the duration of works conducted
- The subcontractor as a part of their work scope will provide Supervision to all work groups, the sub-contractor Supervisor is responsible for the application of the health and safety standards within their scope of work. UGL will provide support and monitor sub-contractors to ensure the health and safety compliance requirements are implemented.

Further, UGL requires its contractors/subcontractors to:

- Take part in site inspections and audits
- Take part in project toolbox meetings/pre-start briefings
- Complete reviews of documentation (including SWMS for high-risk construction tasks) for subcontractors that they engage
- Provide verification that workers are appropriately licensed and trained to undertake their designated work activities.

For additional information refer to Requisition to Pay on the UGLMS, and the following key documents:

13 CHANGE MANAGEMENT

Change Management is the identification and management of change events that have the potential to negatively affect the safety of personnel, the environment or integrity of plant and equipment.

For additional information refer to UGLMS Change Management Procedure

14 COMMUNICATION AND CONSULTATION

UGL is committed to the implementation of effective and relevant H&S communication and consultation mechanisms on its projects to ensure that the workforce remains informed of potential risks associated with carrying out their roles and take an active part in determining suitable controls to manage any identified risks.
UGL is committed to ensuring that relevant stakeholders are identified for this project, and that they are communicated and consulted with to ensure that they are aware of health and safety risks that have the potential to impact on them and have an opportunity to provide input into how the identified risks can be managed.

Key stakeholders identified for this project include:

- Employees
- Subcontractors
- Snowy Hydro
- Other Principal Contractors working on adjacent scope
- Consultative committee arrangements
- The public and local community
- Interface agreements.
- Emergency Services
- SafeWork NSW

UGL shall have a proactive relationship with SafeWork NSW, including facilitating regular site visits by SafeWork NSW to project worksites.

Effective resolution of safety issues is achieved:

- at the lowest project management level possible; and by
- Promptly investigating, implementing and agreeing to the appropriate course of action.

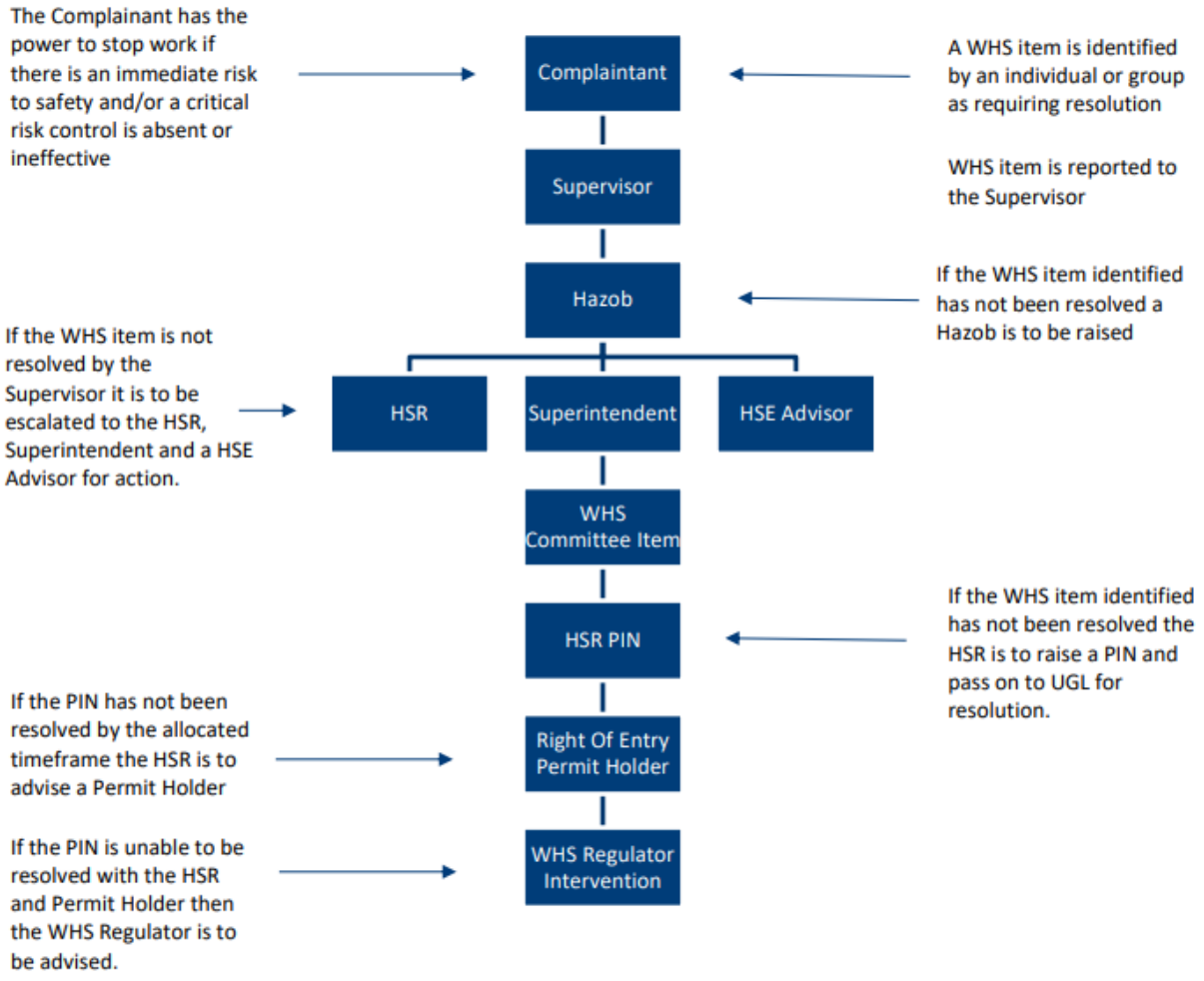
It is recognized that problems related to hazardous situations may arise from time to time, which require immediate attention and decision. Where a worker (UGL or Subcontractor) encounters what they believe to be a safety hazard or is allocated work to perform in what they consider constitutes an unsafe situation, they have the legal right, and are encouraged to remove themselves from the area of the perceived hazard and notify their respective Supervisor (UGL or Subcontractor) for a resolution to the issue.

To ensure that there is a robust process in place, all members of the HPP project are to follow the below flow chart to resolve WHS issues.

HPP WHS ISSUE RESOLUTION

Project Name:	Hunter Power Project
Project Number:	MWC 3200-0663-3305

The purpose of this document is to highlight the steps involved in the escalation process of WHS issue resolution.



For additional assistance and information, refer to:
Communication and Consultation Procedure (UGLMS-131-345)

14.1 COMMUNICATIONS AND CONSULTATION MECHANISMS

UGL must implement the following communication and consultation mechanisms on this project.

14.1.1 Design Meetings

Forum Purpose:	Design meetings are primarily focused on reviewing design changes and ensuring buildability of proposed design.

Frequency:	As determined by UGL Management
Nominated Attendees:	• UGL Project Director • Project Design Engineer • Design Consultants • Other parties as nominated by UGL's Management.
Distribution:	All attendees and apologies

14.1.2 Project Team Meetings

Forum Purpose:	To discuss all issues that may be relevant to the project team, including but not limited to, project progress, up and coming works, Health and Safety related matters, contract administration issues and teamwork and life balance. On a quarterly basis these meetings must be used to review HSE Performance as per s12.3 – 'Monitoring and Reporting on Project HSE Performance'. Project Team Meetings must also be used to review Monthly Team Briefs, including a review of associated HSE results (where relevant).
Frequency:	Weekly (or as determined by UGL Management)
Nominated Attendees:	• Project Director / Construction Manager • Site Supervisors • Consultants (where required) • Design Engineer (where required) • Contractor/Subcontractor Representatives (where required)
Distribution:	All attendees & apologies

14.1.3 Project Safety Risk Register Reviews

Forum Purpose:	To identify hazards and plan for controls to ensure risks are mitigated throughout the construction and commissioning phases of the project in accordance with the project work schedule. Controls will be cascaded to SWMS for high-risk construction work activities This process also identifies responsibility for ensuring controls are in place.
Frequency:	As outlined in section 6 of this HSMP.
Nominated Attendees:	• Site Manager/Construction Manager • Health & Safety Advisor/Manager (if applicable) • Contractor/Subcontractor Representatives • Employees (as required) • Subject matter experts as required
Distribution:	All Attendees & apologies

14.1.4 SWMS Development

Forum Purpose:	To engage workers involved in an activity during the development and review of safe work method statements that they are required to work to. Further, the forum is aimed at enabling a proactive communication and consultation mechanism with workers, HSRs (where relevant) and management representatives prior to commencement of High-Risk Construction Activities.
Frequency:	Ad-hoc (as required by the work activity)

Nominated Attendees:	• Site Supervisor • Health & Safety Representatives (if applicable) • Contractor/Subcontractor Representatives (where required / if applicable) • Workers involved in the task
Distribution:	All workers involved in the task

14.1.5 Toolbox Meetings

Forum Purpose:	To proactively discuss relevant health and safety matters with relevant project stakeholders. Typical items discussed in toolbox meetings include: • Up and coming works and associated Critical Risk activities • Current Work Issues • On site hazards • Plant and Equipment • Incident and Emergency Management Requirements • Other high-risk activities.
Frequency:	Monthly
Nominated Attendees:	• Site Supervisor • Health & Safety Representatives (if applicable) • Contractor/Subcontractor Representatives (where required / if applicable) • Employees (as required)
Distribution:	All Attendees & apologies

14.1.6 Pre-start Daily Meeting

Forum Purpose:	To communicate site wide information about relevant issues or hazards and controls, previous incidents, and proposed site changes. This process also provides a reasonable opportunity for the workforce to express their views and to raise and site issues.
Frequency:	Daily
Nominated Attendees:	• Site Manager/Construction Manager • Health & Safety Advisor/Manager (if applicable) • Site Supervisor • Health & Safety Representatives (if applicable) • Contractor/Subcontractor Representatives (where required / if applicable) • Employees (as required)
Distribution:	All Attendees

14.1.7 Project Safety Inspections

Forum Purpose:	To identify hazards throughout the site and ensure that hazard controls are implemented and effective as per the relevant SWMS and Project Risk Assessment. Project safety inspections must include representation from relevant UGL employees, contractors, and subcontractors that are working on the project. This process also identifies responsibility for rectifying any issues observed during the inspection process.
Frequency:	Weekly (so far as is practicable)

Nominated Attendees:	• Site Manager/Construction Manager • Health & Safety Advisor/Manager (if applicable) • Contractor/Subcontractor Representatives • Employees (as required)
Distribution:	All Attendees & apologies

14.1.8 Interface Parties

Forum Purpose:	To agree on and discuss interface arrangements between parties that are required to operate in the same area. E.g., Utility Companies, Rail Infrastructure Manager (RIM) or other similar party. This should clarify: • Systems being operated under • Communication expectations • Authority for decision making
Frequency:	Ad-hoc (before entering a landowner's property)
Nominated Attendees:	• Project Director (or delegate) • UGL SME for interface • HSEQ Resources (as required) • Interface Party Managers
Distribution:	All Attendees & apologies

14.1.9 Other Mechanisms

Other mechanisms to be used for the purposes of communication and consultation on this project include:

- Site Inductions
- Site signage (where relevant and practical using standard international symbols)
- SWMS reviews
- Client meeting
- Emails and memos
- Safety Bulletins / Alerts
- Formal and informal training.
- Project Central (UGL SharePoint).

14.1.10 Reporting

At a minimum, the UGL shall:

1. Prepare and submit to Snowy Hydro, no later than the fifth Business Day of each month, as part of the Project monthly report, a monthly Health and Safety Performance Report, in a format agreed between the parties, for the previous calendar month.
2. Prepare and submit a health and safety completion report. UGL shall agree with Snowy Hydro on the format of the health and safety completion report. At a minimum the health and safety completion report will include the following:
    - Any documentation that details any residual risks to health and safety in connection with the Works
    - A summary of the safety information in the Monthly Health and Safety Performance Reports across the life of the Work
    - Details of any health and safety innovations or initiatives implemented in connection with the Works.

14.1.11 Overcoming Communication Barriers

As workplaces become increasingly diverse, language can become an obstacle for many people. Workers for whom English is not their first language may not fully understand workplace procedures. Miscommunication or lack of understanding can lead to unwanted safety events occurring.

If required, UGL will seek ways to simplify communication, provide additional training, reinforce correct behaviours, and make workers feel comfortable to raise concerns. All workers have the authority to stop work or pause to make safe if controls are not effectively in place or understood.

It is expected that the project will have Japanese quality inspectors and engineers assisting in equipment installation.

UGL will provide an induction translated in Japanese if required or utilise the Japanese interpreter as provided by SHL.

15 AUDITS, INSPECTIONS AND MONITORING

15.1 AUDITS

UGL's Audit Program consists of 3 layers, as detailed in the diagram below.

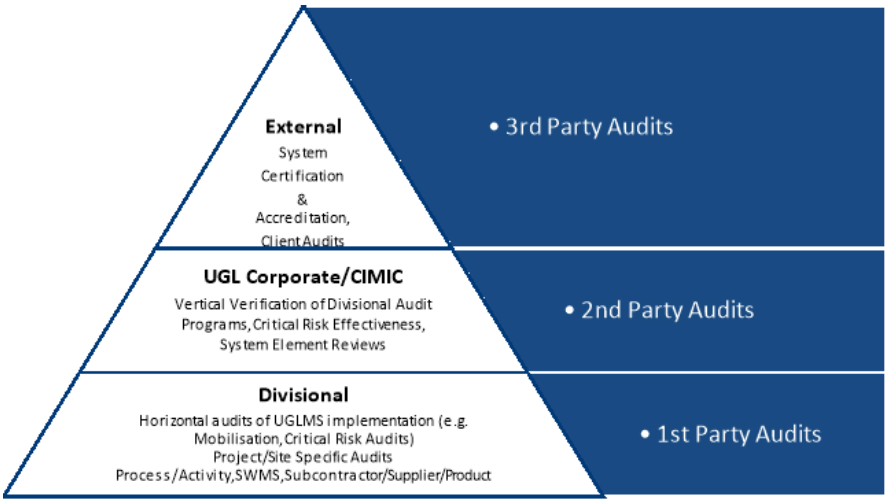


Figure 4: UGL's three-tiered audit program

As part of the project start-up / mobilisation process, an Audit schedule is developed to verify implementation of UGL's Critical Risk program, and broader HSEQ Management System.

The development of the Audit Schedule must as a minimum take the applicable critical risks detailed in s7 – 'Critical Risk Management' of this plan into consideration.

The Audit Program for this project is stored in Synergy

For additional information refer to Governance and Assurance on the UGLMS, and the following key documents:

- HSEQ Audit & Assurance Program Management Procedure (UGLMS-131-740)

15.2 INSPECTIONS

HSE Inspections are scheduled and monitored for completion using the CheckIt Planner.

For additional information refer to Governance and Assurance on the UGLMS**.**

15.3 MONITORING EQUIPMENT

Equipment used for monitoring purposes must be calibrated and maintained in accordance with the manufacturers' requirements and operated by suitably competent persons.

For this project, the management of monitoring equipment that requires calibration must be document on the Project CheckIt Planner and be maintained in accordance with UGL's Procedure for Control of Inspection, Measuring and Test Equipment.

For additional information refer to Governance and Assurance on the UGLMS, and the following key documents:

- Control of Inspection, Measuring and Test Equipment (UGLMS-131-355)

15.4 EXPOSURE MONITORING

Where the project risk assessment identifies exposure monitoring as a control to ensure that workers are not placed at risk of overexposure, a suitably qualified persons must be engaged to conduct exposure monitoring in accordance with relevant standards, using appropriately calibrated equipment.

The following types of exposure monitoring are expected to be used on this Project:

- Air quality monitoring (including LEL / O2)
- Dust Monitoring (including for Asbestos)
- EME Exposure
- Noise.

For additional information refer to Fit for Work on the UGLMS.

16 DOCUMENT CONTROL AND RECORDS MANAGEMENT

HSE related documents in use on this project are to be controlled and reviewed regularly to ensure that the documents remain adequate and effective for their intended purpose and continue to meet legal and other requirements.

The Document Management System for this project is UGLMS

Electronic records for this project are stored in Project Central (UGL SharePoint).

If there is a requirement detailed in the UGLMS or the Critical Risk Control Protocol that the project is unable to comply with, an exemption must be applied for, in accordance with UGL's Document and Records Management Procedure. Exemptions that apply to this site/project are detailed in **Appendix 4 – 'Exemptions'** of this plan.

For additional information refer to Governance and Assurance on the UGLMS, and the following key documents:

- CIMIC Record Retention Policy
- Document and Records Management Procedure (UGLMS-131-540)

17 LEGAL AND OTHER REQUIREMENTS

UGL's provides access to relevant compliance obligations (including legal requirements) through access to UGL's in-house legal counsel, subscription to relevant regulator publications, engagement with relevant industry associations and through subscriptions to legal register services.

For this Project, a legal register must be established and maintained, using the base templates from the UGLMS for their creation.

For additional information refer to Governance and Assurance on the UGLMS**.**

- To access Workplace Safety Australia, go to the Useful References Page on the UGLMS

Subcontractors must adhere to all relevant Workplace Health & Safety Laws applicable to the project.

17.1 AUSTRALIAN AND OTHER INTERNATIONALLY RECOGNISED STANDARDS

UGL has a subscription to access Australian and International Standards through Intertek. This subscription provides UGL employees with copies of Australian and International Standards through UGL's intranet portal. By having the Standards readily accessible through our intranet, we are able to ensure that our knowledge base remains current and that we apply the appropriate practices throughout the business. For this project UGL will ensure that all employees and sub-contractors comply with relevant Australian Standards.
To access InterTech, go to the Useful References Page on the UGLMS

Appendix 1: Responsibilities

The following roles and responsibility matrix translate action requirements which must be completed by the responsible position holder. Additional information can be found at the HSMP reference number and relevant UGL Safe Work Procedure or Standard.

HSMP Activity R = Direct Responsibility A = Assisting person with direct responsibility	HSE Professional	Project Director	Construction Manager	Supervisors	HSRs / WHS Committees	Subcontractor Mgt.
Develop, implement, update and maintain this HSMP	A	R	A	A		
Managers and supervisors, those who plan and direct work, are accountable for ensuring that a safe behaviour and safe practice culture is implemented and maintained by field personnel and subcontractors.	A	R	A	R	A	R
UGL management is directed to act responsibly and promptly to correct unsafe practices and address poor behaviour by implementing the skills learnt in relevant training.	R	R	R	R	A	A
The HSE Professional in conjunction with the UGL Project Director will implement the safe work behaviour programs in a way that fits the operational requirements of the site.	R	R	A	A	A	A
As principal contractor, UGL will perform its role as outlined in the WHS Act 2011 and WHS Regulations 2017	A	R	R	R	A	A
UGL shall review the safety and health conditions contained in the UGL commercial instruments to ensure they reflect current Safety requirements and needs of the project. Prior to commencement of works on the project, the Subcontract Commencement Meeting must be completed. The Subcontract Commencement Meeting shall confirm the mutual understanding of all requirements in the Subcontract and establish lines of communication, protocols, variation and issue resolution processes.	A	A	R	R		A
HSE Risk Register forums shall be convened by the UGL Project Director and may be carried out in consultation with key stakeholders such as UGL engineers, supervisors, relevant UGL Subcontractors, client representatives and other stakeholders that may be required during the planning of work.	A	R	A	A	A	A
Where Subcontractors perform UGL work activity, they shall be provided with the relevant section of the HSE Risk Register by UGL. They shall also be provided with copies of any required UGL health and safety procedures, as identified when developing the HSE Risk Register. At a minimum the UGL Contractor HSEQ Requirements will be provided. (The subcontractor will be involved in the Risk Register and will have access to the relevant documents through the HE team)	R	A	A	R		A
UGL / Snowy nominated managers shall ensure that where necessary, this HSMP, Work Instructions and/or Safe Work Method Statements (SWMS) incorporate HSE Risk Register controls such as legislation, best practices and/or client requirements	R	A	A	R		A
UGL / Snowy or its Subcontractors will produce SWMS for their works being carried out on the project to ensure that residual risks and mitigation strategies identified in the HSE Risk Register are transferred and implemented and that “Work Activity” specific hazards are identified and controlled.	A	A	R	R		R
Project HSE Professionals, as required, shall provide assistance to the developer(s) of the SWMS which may include identifying the legal requirements, technical support, UGL policies and procedural requirements and other requirements that are directly applicable to the SWMS being developed.	R	A	A	A		A
All SWMS developed or submitted must be reviewed using the SWMS Review Checklist prior to the commencement of works on the project.	A	R	A	R		A
As part of the ongoing risk management strategy and performance reviews, UGL and Subcontractors shall audit SWMS's in the field, during a systems audit.	A	R	A	R		A
The nominated UGL manager shall ensure the permits are maintained and appropriate records kept.	A	R	A	R		A
The project HSE Professional will be responsible for preparing and maintaining their legal and other requirement register. All changes to the registers, including those received from the HSE Corporate System Manager, and any changes identified locally will need to be included in the register.	R	A				A
Implementation and monitoring of project HSE Objectives and targets	A	R	A	A		

HSMP Activity R = Direct Responsibility A = Assisting person with direct responsibility	HSE Professional	Project Director	Construction Manager	Supervisors	HSRs / WHS Committees	Subcontractor Mgt.
The management of the project is ultimately under the control of the Project Director. Following the communication of the WHS responsibility and accountability matrix, the recipient(s) will sign the acceptance as evidence of the communication and consultation and acceptance of the roles and responsibilities. The WHS responsibility and accountability matrix must be reviewed by the UGL Project Director to ensure they adequately reflect the scope of work and projects human resources.	A	R				
The Project has appointed a qualified and experienced UGL HSE Professional to assist management in workplace health and safety administration, monitoring, training, coaching, inspection and auditing.	A	R				
UGL Project Director, Construction Manager, Area Manager , Superintendents, Supervisors, assigning personnel to tasks shall ensure that personnel are appropriately trained and competent for tasks they are assigned.	A	R	R	R		
All personnel working on the project shall attend the UGL site specific project induction, which shall include any key requirements of this plan and be amended as necessary to reflect the requirements of the project at that stage of delivery. Training records for UGL workers are recorded and maintained in the Power master training matrix and project specific matrix. Subcontractor's training records and qualifications pertaining to the project (and others deemed necessary) shall be recorded in a project training register.	R	A	A	A		
UGL management is required to undertake consultation through the established consultative mechanisms	A	R	R	R		
A site HSE notice board shall be installed in a clearly visible location which is accessible to workers.	R	A	A	A		
UGL Project HSE Manager ensures that the Safety Alert is produced and submitted to the Utilities HSE Operations Manager for approval.	R	A				
A set of Safety Talk training packages is to be maintained by the UGL HSE Project Manager and used by UGL Supervisors during toolbox sessions.	R	A	A	R		
The Project Director shall ensure the safety issue resolution process is followed. Disciplinary action for safety non-conforming by a worker shall be administered by the UGL Project Directorr with the assistance of the HR Department.	A	R	A	A		
The project objectives and targets shall be monitored on a monthly basis and where the stated targets are not met the UGL Project Director shall review the governing process and ensure the necessary corrective actions are engaged.	A	R	A			
UGL shall ensure the formulation and letting of Subcontracts and/or Supply packages and that they include the appropriate schedules of WHS requirements as applicable to the works. All sub-contractors are required to submit SWMS' and associated documents relevant to their scope of works on the project as a minimum. UGL shall review the Plan/SWMS and provide feedback which may include the acceptance or rejection of the plan and the reasons for the findings.	A	R	A	R		R
All incidents, near misses and hazards with the potential to cause injury, damage, or harm to personnel, equipment or the environment shall be reported and investigated. UGL Supervisors are required to immediately notify the UGL Project Director should these events occur on site.	A	R	R	R		
All Subcontractors shall immediately inform UGL of any lost time injury or significant near miss, notifiable incident involving its workers, its sub-subcontractors, or members of the public. All other minor incidents must be reported to UGL within 24 hours.	A	R	R	R		R
All incidents shall be recorded and submitted in the Synergy database within 24 hours of the incident occurring. Any significant event shall also require that an initial safety alert be distributed via the HSE Safety Alert Database within 24 hours of the event being submitted in Synergy.	A	R	R	R		
UGL Project Director shall be responsible for coordinating the initial investigation. The HSE Project Manager or Supervisor will provide assistance as and when required by the Project Director.	A	R	A	A		
UGL shall develop a project specific Emergency Response Plan (ERP) including risk scenarios and provision of emergency equipment & first aid as associated with the scope of work and documented in the project risk register and checkit planner.	A	R	A	A		

HSMP Activity R = Direct Responsibility A = Assisting person with direct responsibility	HSE Professional	Project Director	Construction Manager	Supervisors	HSRs / WHS Committees	Subcontractor Mgt.
UGL project management will liaise with UGL Health Services in sourcing and engaging a preferred medical practitioner for the provision of medical treatment for our workers and that, where practical, all injuries be referred to the preferred medical practitioner.	A	R		A		
UGL HSE Project Manager shall conduct and/or manage safety audits.	R	A		A		
The project shall implement a Checkit – Safety Activity Planner. The Checkit Planner will provide for a schedule of inspections and audits for the projects including those contained in UGL standards, procedures and management plans.	A	R	A	A		
The UGL Construction Manager in consultation with the UGL HSE Manager shall determine the frequency of HSE inspections and audits and these will be documented in the Checkit planner.	A	R	A	A		
The UGL supervisor, and/or UGL HSE Professional and/or Subcontractor representative(s), such as managers / workers may be involved in the inspections of the workplace, plant, equipment substances, structures etc.	R	A	A	R		A
All corrective actions raised from a workplace inspection, conducted by management or client inspections (other than any HSE audit) shall be registered in the project respective Corrective Action Plan Register (or issues register) by UGL.	R	A	A	R		
An independent audit of the Snowy Employer Requirements shall ensure an audit of the UGL HSMP is undertaken by an Independent Workplace Health and Safety Auditor (the Auditor) prior to UGL submitting it to the Employer, within three months of commencement and every 12 months.	R	A				
A monthly Health and Safety Report will be submitted to Snowy Hydro.	A	R	A			
This HSMP, associated Emergency Response Plan and its procedures shall be reviewed by UGL Project Director for adequacy and effectiveness and as an opportunity for continual improvement. The review may be undertaken by such persons as UGL line managers and UGL HSE personnel and any additional management as considered appropriate by the UGL Project Director.	A	R	A	A		
The project management team is responsible for the generation control and submission of safety documentation and records.	R	A	A	A		
The HSE Project Manager is responsible for the management of records and documents associated with safety management of the project. The operations team will be supported by the local HSE resource with document management.	R	A	A	A		

Appendix 2: Health & Safety Policy

Health and Safety Policy

UGL management systems and processes underpin our commitment to achieving our One HSE Culture based on Risk Management, Standards, Communication and Involvement.

We prioritise health and safety risk management by

- Recognising our moral and legal responsibility to provide a physical and psychologically healthy and safe work environment for employees, clients, subcontractors, vendors and visitors at all UGL workplaces.
- Embedding critical risk management into everything we do.
- Eliminating or reducing hazards and risks by applying a hierarchy of risk control measures to prevent injury or damage.

We set and reinforce high standards by

- Ensuring our operations are designed and planned to eliminate or minimise risks of injury, illness or damage to property or the environment.
- Establishing and achieving measurable objectives and targets to continually improve workplace health and safety performance.
- Driving health and safety performance by implementing structured improvement plans.
- Implementing our certified (ISO45001) occupational health and safety management systems.
- Monitoring operations to verify our activities comply with legislation, standards, performance requirements and commitments.

We promote open communication by

- Listening to, acting and providing prompt, honest feedback on concerns raised by staff and workforce.
- Encouraging innovation and creativity.
- Utilising our system as a platform to communicate with our workforce.

We foster involvement by

- Consulting with our workers and stakeholders in the development, implementation and promotion of healthy and safe systems of work.
- Empowering every employee at UGL is to stop work and report to their supervisor if they have any concerns about the safety of an activity.
- Building health and safety skills and knowledge to encourage involvement with a focus on critical risk controls.
- Promoting a positive, fair and inclusive work environment.

Managing Director UGL: (Doug Moss) **Date:** 22 January 2021

one HSE CULTURE

integrity accountability innovation delivery SAFETY

A MEMBER OF THE CIMIC GROUP CIMIC

Appendix 3: Appointed Roles

The following people have been deemed competent and appointed on this project to complete roles that require a formal designation/appointment.

Appointed Role	Required for this Project?	Name(s)	Contact Details	Associated Procedure	Limitations / Restrictions
Crane Coordinator(s)	☒	Andrew Poli (Certified Structural Engineer)	0473 634 129	Mobile Cranes and Lifting Equipment Procedure UGLMS-131-524	
Temporary Works Coordinator	☒	Cathal Nicholl Package Lead – Engineering Mechanical	0427 416 317	Utilities Temporary Works Procedure UGLMS-131-583	
Authorised Isolation Officer	☒	Appointed Persons form and process	Management System	Energy Isolation Procedure UGLMS-131-363	
Working at Height Permit Authority	☒	Appointed Persons form and process	Management System	Working at Height Procedure UGLMS-131-372	
Loading Manager	☒	Daniel Spielmann (Logistics Manager)	0433 371 677	Heavy Vehicle Management – Chain of Responsibility UGLMS-131-542	

Appendix 4: Critical Risk Control Exemptions

The following exemptions have been approved for this Project:

#	Exemption Scope	Approved By	Date Approved
1	*No exemptions are in place*		
2			
3			
4			
5			

Appendix 5: HSEQ Delegation of Authority

✓ - Approver E – Endorser I - Involved in Decision Authority	MD	Group GM HSEQ	EGMs	GM HSE Operations - Division	Ops GMs	HSE Operations Managers	Operations Managers / Senior Off-site ops roles	Project/Site Managers	Group HSEQ Manager – Systems and Assurance	E, Q & RS SMEs / Managers
UGL HSEQ Strategy and Targets/Objectives	✓	E	E	I	I	I			I	I
Critical Risk Control Protocol (CRCP)	✓	E	E	I	I	I			I	I
HSEQ Policies & One HSE Culture Framework	✓	E	I	I					I	
Business wide HSEQ procedures required for legal and certification compliance		✓	I	I		I			E	I
Divisional / LoB HSEQ Procedures				✓ H&S	E	E H&S			✓ E, Q & RS	E E, Q & RS
Project/Site HSEQ Procedures						✓ H&S	I	E		✓ E, Q & RS
CRCP Exemptions				E	✓	I	I	I		
Site/Project Based Non-CRCP Exemptions						E		✓		
New HSEQ Business Systems – e.g. Synergy, Solve Health, UGL MS, One Learning	✓	E		E	I	I			E	I
HSEQ Plans and Project Risk Assessments						E H&S		✓		E E, Q & RS
New hires (HSEQ Roles)				E LoB Roles	✓ LoB Roles	E - Site Roles I – LoB Roles		✓ Site Roles	✓ Corp E, Q & RS Roles	E Site E, Q & RS Roles
HSEQ Input into Gate Process (A-G)				I < $100M		I > $100M				
HSEQ Mobilisation Readiness Approval				I	✓	E	I	I		I
Incident Investigations (Sev 1, 2 & 3)	✓ Sev 1	E Sev 1	✓ Sev 2	E Sev 2	✓ Sev 3	E Sev 3	I	I		I E, Q & RS
New Business Licences					✓#		E	I		I
Renewal of Business Licences						E	✓#	I		I
Approval of claims settlements (W.C. Self Insured, PL under deductable limit)	✓*									
Governance framework for non 100% owned UGL entities		✓**	E	I	I					

Appendix 6: Contractor HSEQ Requirements

Refer to the UGLMS-131-807 Version: 11.0 - UGLMS HESQ Management Requirements