Prepared for
SNOWY HYDRO LIMITED
ABN: 17 090 574 431

# Subsidence Management Plan - Independent Environmental Audit

22-Dec-2025

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Client: SNOWY HYDRO LIMITED

ABN: 17 090 574 431

Prepared by

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# Quality Information

Document Subsidence Management Plan - Independent Environmental Audit

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Originator Tim Rannard

Verifier/s Peter Waddell

**Revision History**

| Rev | Revision Date | Details | Approved | |
|---|---|---|---|---|
| | | | Name/Position | Signature |
| A | 17-Dec-2025 | Draft – Rev A | Alec Palmer<br>Project Manager | |
| 0 | 22-Dec-2025 | Final | Alec Palmer<br>Project Manager |  |
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# 1.0 Introduction

## 1.1 Background

In 2023, a Subsidence Management Plan was developed by Snowy Hydro Limited (SHL) in response to the Snowy 2.0 Main Works Modification Application (SSI-9687-MOD 2). In accordance with Schedule 3, condition 66 of the Department of Planning, Industry and Environment (DPIE) Conditions of Approval, AECOM Australia Pty Ltd (AECOM) was engaged by SHL to undertake an Independent Environmental Audit (IEA) of the Subsidence Management Plan.

AECOM was engaged under the Professional Service Framework and with reference to the assignment confirmation 940901 – Assignment 16.

## 1.2 Scope of the Audit

Details of the Audit are:

| | |
|---|---|
| Requested by: | Department of Planning, Industry and Environment (DPIE) |
| Request/Commencement Date: | 14/10/2025 |
| Lead Auditor: | Tim Rannard |

The Audit was implemented in accordance with Schedule 3, condition 66 of the DPIE Conditions of Approval, as outlined below:

- Perform the required Independent Environmental Audit (IEA) with a suitably qualified team
- Include consultation with relevant agencies
- Assess the environmental performance of the works and determine if they are complying with the requirements of the Subsidence Management Plan and the requirements of conditions 63 and 64 in the consolidated version of the CSSI approval CSSI-9687
- Review the adequacy of the approved strategies, plans and programs
- Recommend appropriate measures or actions to meet the requirements of condition 63 and 64 above.

## 1.3 Audit Team

**Lead Auditor –Timothy Rannard:** Technical Director and engineering geologist with over 30 years' experience as a designer in the geotechnical and tunnelling industry.

**Audit Support –Marco Rafanelli;** Principal Geotechnical Engineer, with over 17 years' experience in geotechnical works including tunnelling and impact assessment.

**Project Manager – Alec Palmer;** Principal Project Manager and Environmental Scientist with over 10 years experience in the environmental industry.

## 1.4 Formation of the Sinkhole

Tunnelling using a Tunnel Boring Machine (TBM) commenced excavation of the head race tunnel (HRT) adit portal in March 2022. Around May 2022, the TBM began encountering adverse geological conditions, which can be broadly characterised as unstable subsurface materials. In December 2022, a sinkhole formed at the surface near the adit portal and TBM operations were suspended.

The TBM cutting head was approximately 35 m below ground level (bgl), directly below the sinkhole and 140 m horizontally from the HRT adit portal. The sinkhole was located outside of the approved construction envelope for Snowy 2.0.

A modification (MOD2) report for remedial works outside the approved construction envelope for Snowy 2.0. was submitted in August 2023 and the modification was approved by Minister for Planning and Public Spaces on 29 December 2023.

# 2.0 Audit Methodology

## 2.1 Selection and endorsement of audit team

The audit team was officially endorsed by the Department of Planning, Housing and Infrastructure on 14 October 2025 (Appendix C), in accordance with the requirements in the CSSI 9687 Approval Section 66, which states that the audit must:

a. *be conducted by a suitably qualified, experienced and independent team of experts, including a lead auditor, whose appointment has been endorsed by the Planning Secretary.*

## 2.2 Compliance evaluation

To evaluate the compliance of the Subsidence Management Plan, AECOM completed the following tasks, as outlined in the methodology of the proposal.

### 2.2.1 Task 1 Data Collation

Section 1.3 in the Subsidence Management Plan lists several named documents that were provided by SHL for review. This section also notes several other document types relevant to the audit including:

- Design Drawings, Reports and Specifications;
- Project Geotechnical Instrumentation and Monitoring Plan;
- Construction Method Statements;
- Inspection and Test Plans;
- History of Monitoring results;
- Timeline of tunnel excavation and support installation;
- Documentation related to relevant environmental impact assessment and monitoring.

### 2.2.2 Task 2 Site Visit

The audit team, accompanied by SHL, conducted a site visit on 15 and 16 October 2025. The site visit assessed the site conditions and was an opportunity for the audit team to observe the site works.

### 2.2.3 Task 3 Consultation with Agencies

SHL facilitated communication between AECOM with the following agencies to understand their involvement in undertaking, reviewing or witnessing the monitoring of the works. It also provided an opportunity to confirm that there is no missing or outstanding documentation. The identified stakeholders are:

- New South Wales Parks and Wildlife Services (NPWS)
- Future Generation Joint Venture (FGJV)

The following questions were provided to NPWS using a questionnaire.

1. Was NPWS involved in reviewing or witnessing work undertaken as part of the subsidence monitoring?
2. Who undertook the above work and what were their project role, experience, and qualifications?
3. Has NPWS been provided with copies of the results from the subsidence monitoring?
4. Does NPWS have any concerns regarding the way the subsidence monitoring was undertaken?
5. Any other commentary relating to the Tantangara Audit

The following questions were provided to FGJV using a questionnaire.

1. Which organisation was tasked with establishing the settlements points and undertaking the subsidence monitoring?
2. Who within that organisation did the work and what was their project role, experience, and qualifications?
3. Describe the process from collection of the raw monitoring data to presentation and assessment of the data?
4. Which organisation was tasked with reviewing and assessing the monitoring data?
5. Who within that organisation did the work and what were their project role, experience and qualifications?

### 2.2.4 Task 4 Document Review

The collated documentation and data was reviewed and outcomes compared against the requirements of the Subsidence Management Plan and the requirements of conditions 63 and 64 mentioned in the consolidated version of the CSSI approval CSSI-9687, that is:

- 63. The Proponent must ensure that any project related subsidence impacts do not cause greater than negligible environmental consequences on the National Park Estate, including but not limited to water, biodiversity and heritage values.
- 64. Prior to recommencing tunnelling using tunnel boring machine Florence as described in MOD 2 or commencing tunnelling for the Marica west adit as described in MOD3, the Proponent must prepare a Subsidence Management Plan in respect of the tunnelling works by tunnel boring machine Florence and the Marica west adit, to the satisfaction of the Planning Secretary and in consultation with NPWS. This plan must:
    a. be prepared by a suitably qualified geotechnical expert;
    b. include detailed measures and controls that would be implemented to ensure performance measure in condition 63 is met;
    c. include a detailed description of subsidence monitoring prior to tunnelling recommencing and ongoing monitoring at surface or within the tunnel;
    d. include a risk assessment and trigger action response plan (TARP) to identify and manage settlement risk; and
    e. include a contingency plan and adaptive management process.

### 2.2.5 Task 5 Audit Report

This Independent Environment Audit, addressing:

- The environmental performance of the works;
- Areas where the works are not complying with the requirements of the Subsidence Management Plan and the requirements of conditions 63 and 64 in the consolidated version of the CSSI approval CSSI-9687;
- Comments regarding the adequacy of the approved strategies, plans and programs; and
- Recommendations regarding appropriate measures or actions to improve environmental performances.

# 3.0 Data Collation

## 3.1 Documentation provided

**Table 1** details the documentation provided by each relevant agency or stakeholder to support the investigations of this Audit Report.

**Table 1 - Agency Documentation**

| Document | Relevant Agency |
|---|---|
| Construction Method Statements | FGJV |
| Design Drawings, Reports and Specifications | FGJV |
| Environmental Assessments | SHL |
| Geotechnical Instrumental and Monitoring Plans | FGJV |
| Inspection and Test Plans | FGJV |
| Tunnel Excavation Timeline | FGJV |
| Water Management Plan | FGJV |
| Water Monitoring Reports | FGJV |
| Agency Questionnaire Response | NPWS |
| Agency Questionnaire Response | FGJV |

# 4.0 Site Visit

Details of the Site Visit were as follows:

| | |
|---|---|
| Date: | 5 November 2025 |
| AECOM Attendees: | Timothy Rannard<br>Marco Rafanelli |
| SHL Attendees: | Amelia Wilson<br>Diego Avi<br>Guy Boardman<br>Nick Chapman |
| Agenda: | **1:30 pm:** Arrive at the Tantangara gatehouse and complete inductions and sign-in process'.<br>**2:00 pm:** Meet the SHL Engineers at the Subsidence site to receive Site briefing, discuss works completed and monitoring undertaken.<br>**3:30 pm:** Leave Site. |

Photographs from the site visit are included in **Appendix A.**

## 4.1 Site Observations

The following site observations were made:

- The former sinkhole had been remediated with the disturbed ground covered by erosion protection measures (jute mesh and coir logs).
- The survey monuments generally remain in place and appear to be consistent with the locations shown in the subsidence management plan.
- A steel post used to support the survey station remains in place.
- Several discarded prisms were noted adjacent to survey monuments.
- Feral horses were noted grazing close to the former sinkhole.

## 4.2 Site Discussions

It is understood that the monitoring proceeded as planned with minor disruptions due to the prisms on the survey monuments being disturbed by wildlife.

The measured subsidence remained below alert levels and monitoring stopped once the TBM was well clear of the monitoring area.

# 5.0 Consultation with Agencies

## 5.1 Relevant Agencies

In reference to the MOD2 - Remediation and Ground Consolidation submission (CSSI-9687) – Modification Report, the following seven agencies provided responses:

- NSW Environment Protection Agency (EPA)
- Department of Planning and Environment (DPE) Water
- Heritage NSW
- Water NSW
- NSW Department of Primary Industries (DPI) - Fisheries
- DPE - Biodiversity and Conservation Division
- NPWS

A summary of the agency responses to the MOD2 - Remediation and Ground Consolidation submission are shown within **Table 2**. It should be noted that responses related to remediation and/ or rehabilitation are included below as to not paraphrase agency comments, however do not form a part of this Subsidence Management Plan IEA. Based on these responses, it was assessed that NPWS was a key stakeholder and should be consulted as part of the audit.

The contractor (FGJV) was also considered as a key stakeholder and should be consulted.

All other agencies were not considered to be key stakeholders in relation to this audit.

**Table 2 - Agency responses to MOD2**

| Agency | Comments |
|---|---|
| EPA | Recommended the following actions:<br>• The Snowy 2.0 MOD 2 application should be amended to ensure that erosion and sediment controls are site specific for the sensitive receiving environment, and designed/constructed to protect the environmental values of waters and comply with the POEO Act.<br>• Promote use of wastewater for on-site needs such as dust suppression to reduce discharge into Tantangara Reservoir.<br>• The EPA recommends that the suitability of this (backfill) material, its proportions and composition, and its expected impact on the environment/groundwater should be assessed prior to installation.<br>• Groundwater monitoring bores in the vicinity of the proposed works are included in groundwater monitoring and management plans. |
| DPE Water | The proponent should include the following operational requirements for the tunnel boring machine (TBM):<br>• The TBM should be operated in closed mode using a cement-bentonite based slurry when restarting the TBM.<br>• The TBM should maintain the ability to change operating modes between open hard rock and closed soil-like conditions for the duration of tunnelling.<br>• The proponent should maintain and, where possible, expand the investigation of ground conditions in advance of the TBM. |
| Heritage NSW | Heritage NSW requested that the following information be supplied: |

| | |
|---|---|
| | • A description of whether the MOD2 area was subject to pedestrian inspection as part of the survey of the TSU2 and TSU7 and an evaluation of the likelihood that additional Aboriginal objects may be present within the MOD2 area but have not yet been recorded;<br>• The results of salvage works undertaken within TSU2; and records of any consultation undertaken with the Registered Aboriginal Parties in relation to the Modification. |
| Water NSW | No comments made |
| DPI Fisheries | No comments made |
| DPE - Biodiversity and Conservation Division | Key outstanding issues be addressed at or prior to the Response To Submissions (RTS) stage, including:<br>• Further detail in the modification assessment about how the sinkhole is going to be remediated. The current Main Works rehabilitation plan (in draft form - Version 4) does not address this. While it is stated that the rehabilitation plan will be updated, we recommend that this information be provided and assessed as part of the modification. Remediation measures appropriate for remediation of subsidence must be justified and demonstrated to be capable of sustaining pre-subsidence subsurface water/groundwater flows and successful re-establishment of ecologically functioning ground water dependent ecosystems (GDE's).<br>• Provision of the spatial data in the Biodiversity Assessment Calculator (BAM-C) that supports the proponent's Biodiversity Development Assessment Report (BDAR).<br>• Further information to confirm the extent of current works/accounting for areas cleared to date is within set limits under Condition 5 of the Main Works approval, to confirm that no additional offset liability will be generated.<br>• Further minor amendments to the BDAR, including an assessment of uncertain impacts and revision of the Biodiversity Management Plan (BMP), Groundwater Management Plan and Rehabilitation Management Plan to address the MOD 2 impacts and recommendations for mitigation. |
| NPWS | The following outstanding issues be considered by SHL as part of the Response to Submissions process:<br>• Sinkhole remediation (section 3.5 Remediation of sinkhole) – further information is requested on the backfill materials and process for remediation of the sinkhole. In section 3.5 the proposed backfill material is stated to be "fine grained natural material" and "natural grained material" whilst section 6.3.4(iv) states it is mainly stone material, grout and concrete. If 'fine grained natural material' is to be used, please state what substance it is? Further information on the Main Works project's general fill specifications in this document would provide clarity, and also confirmation that those specifications particularly regarding compaction are suitable in this instance.<br>• Surface rehabilitation (section 3.5 Remediation of sinkhole) – states that post remediation of the sinkhole, the sinkhole (surface) and surrounding area will be rehabilitated in accordance with the draft Snowy 2.0 Rehabilitation Management Plan, which will include provisions for remediation of the sinkhole. Understand the draft Snowy 2.0 Rehabilitation Management Plan does not include specifications regarding the sinkhole and suggest it would be appropriate for a short Site Specific Plan to be included in this MOD.<br>• Monitoring of tunnel re-commencement (section 3.7 TBM next steps) – section 3.7 states different monitoring methodologies will be used as tunnelling recommences. NPWS requests further information on the monitoring process, |

| | |
|---|---|
| | including its efficiency to identify an issue immediately and the actions that will be taken. A Trigger Action Response Plan should be considered for this process.<br>• Maximum disturbance footprint (section 3.8 Disturbance footprint) – SHL propose to increase the Snowy 2.0 maximum disturbance footprint from 630 ha to 630.63 ha, whilst not increasing the area of native vegetation allowed to be cleared. Whilst only a relatively small area, we query the appropriateness of increasing the maximum disturbance footprint as the final Main Works biodiversity offset payment (20% of the total) is dependent on the actual final disturbance area compared to this maximum allowed disturbance area .<br>• Geotechnical assessment (Tantangara Modification Geotechnical Report) – Understand that DPE Planning have engaged an external expert to review the geotechnical report. I would be grateful if you can share the assessment provided by your expert with NPWS. One of NPWS's prime considerations with respect to the sinkhole has been for SHL (and their contractor) to understand how the sinkhole occurred and to have appropriate mitigation measures in place to be able to identify any potential future issue and take actions to avoid a negative outcome – whether that is impact at the surface or at depth (eg to groundwater systems and the ecosystems that depend on them).<br>• Groundwater assessment (Appendix C Water Assessment) – as for the Geotechnical Report, I understand that DPE Planning have engaged an external expert to review the Water Assessment. I would be grateful if you can also share this assessment provided by your expert with NPWS. NPWS's second prime consideration has been to ensure there is no ongoing impact to the groundwater systems (and flow on effects to the groundwater dependant ecosystems) from any of the changed methodologies eg closed (slurry) mode and ground consolidation (grouting) being used in close proximity to the groundwater systems. |

## 5.2 Agency Responses

Copies of the responses to IEA questionnaires from the key stakeholder agencies is provided in **Appendix B**.

Responses from NPWS indicated that the Agencies involvement in subsidence monitoring was negligible and they relied on being notified should an Alert or Alarm be triggered.

Responses from FGJV indicated that they were the party responsible for undertaking the monitoring work and also partially responsible for assessing the results (in conjunction with the designers and SHL). The qualifications and experience of the personnel doing the work have not yet been provided to the audit team. It is understood these will be provided separately, with a follow up addendum provided by the audit team to confirm or comment on the appropriateness of the workforce.

# 6.0 Document Review

## 6.1 Snowy 2.0 Main Works – Subsidence Management Plan

The document titled Subsidence Management Plan– Subsidence Management Plan, Version J dated 5 December 2023 was reviewed. Key outputs from the plan include:

- Details of a subsidence monitoring array, including details and locations of survey markers for monitoring within the EIS boundary
- A methodology to be followed for subsidence monitoring outside the EIS boundary
- A Trigger Action Response Plan, including trigger levels
- Reporting, including
    - A fortnightly subsidence monitoring report issued to NSW DPE
    - Notifications to NSW DPE in the event of Action (yellow) or Alarm (red) trigger levels are reached.

## 6.2 Timeline of Tunnel Excavation

This document tracks on a daily basis the work activities undertaken in the tunnel as the TBM traverses the sinkhole area.

Key observations include:

- The sinkhole occurred 15 December 2022, with the face at Chainage 632.88 at 6:00am.
- Tunnel excavation re-commenced 6 December 2023. The TBM operating in closed mode with the face at Chainage 647.95 at 6:00am.
- The tunnel advanced approximately 18.5 m between 1January 2024 and 5January 2024 with daily advance rates ranging from 5.8 m to 1.2 m.
- The TBM was converted to open face mode between 9 January and 12 January 2024 after face mapping showed self-supporting ground.
- Slow tunnelling continued in open face mode until 31 March 2024 with daily advance rates ranging from 11.0 m to 3.2 m. The final record notes the face was at Chainage 1178.73 at 6:00am (i.e. 545 m advanced from when the sinkhole occurred).

## 6.3 Groundwater Monitoring Report

*Quarterly Environmental Water Report December 2023 to February 2024* covers the period of subsidence monitoring. This report noted that groundwater inflows at Tantangara were increasing due to re-commencement of tunnelling activities but were in line with estimates.

## 6.4 Biodiversity Monitoring Report

*Biodiversity Monitoring Program: Year 4 Annual Monitoring Report (2023/2024)* covers the period of subsidence monitoring. This report did not note any specific biodiversity impacts associated with the sinkhole or subsidence monitoring.

# 7.0 Audit Findings

## 7.1 Environmental Performance of the Works

Based on the observations made during the site visit and on review of the provided documentation it is considered that the subsidence monitoring did not cause greater than negligible environmental consequences on the National Park Estate, including water, biodiversity and heritage values.

## 7.2 Non-compliances

Reference to CSSI 9687 Approval Section 66 noted that:

> *Within 6 months of the recommencement of the tunnelling works by tunnel boring machine Florence, unless otherwise agreed by the Planning Secretary, and at any other time requested by the Planning Secretary, the Proponent must commission and pay the full cost of an Independent Environmental Audit of the Subsidence Management Plan described in condition 64*

It is noted that tunnelling commenced on 6 December 2023 and this audit was not formally commissioned until 14 October 2025 (22 months). SHL commenced negotiations to procure the IEA in June 2025, however due to a range of factors including contractual negotiations (between AECOM and SHL), and agency approval of the Audit team, commissioning of the audit was delayed.

The cause of this non-conformance may be due to the requirements of CSSI 9687 Approval Section 66 not being included in the subsidence management plan.

It is considered that the impact of the non-conformance is negligible.

## 7.3 Adequacy of the Plan

The subsidence management plan was technically sound, however, did not adequately address the requirements of CSSI 9687 Approval Section 66 (as noted in the non-conformance above). This is consistent with it being developed by experienced engineering staff, but with limited experience in the planning and approvals process.

## 7.4 Recommendations

- The remnant survey markers, discarded prisms, and survey station be removed from site.
- Bi-annual inspections be made of the sinkhole area to confirm the performance of the remediation works and erosion control measures. This inspection to be included in the project environmental monitoring reports.
- The remediation works at the sinkhole be monitored and any erosion control measures be reinstated if damaged.
- Future subsidence management plans should be reviewed by appropriately qualified personnel with experience in the planning and approvals requirements for the Snowy 2.0 Project.

# Appendix A

## Photographs

# Appendix A Photographs from Site Visit

Photo 1 – General view of the former sinkhole looking west along the approximate line of the tunnel. Footprint of remediated sinkhole in foreground covered with jute matting

Photograph 2 -Grasses growing on remediated sinkhole. Note ground covered in jute matting as erosion protection

Photograph 3 – Site Visit Personnel – From L to R - Diego (SHL), Amelia (SHL), Nick (SHL), Marco (AECOM)

Photograph 4 – Looking west from Remediation sinkhole along line of tunnel. Survey monitoring point in foreground

Photograph 5 – Peg marking edge of monitoring area.

Photograph 6 – Survey monument

Photograph 7 – Survey Monitoring Point. Note damaged Prism on ground

Photograph 8 – Survey Station


Photograph 9 – Survey Station detail

Photograph 10 – Survey monuments along axis of tunnel excavation (looking in the direction of excavation)

Photograph 11 – Looking back from location of Photo 10 along axis of tunnel excavation

Photograph 12 – Survey monument missing prism

# Appendix B

## Agency Questionnaire Responses

# Appendix B Agency Questionnaire Responses

## Agency Questionnaire – NPWS (Nicole Shotter – Manager Snowy 2.0)

**1. Was NPWS involved in reviewing or witnessing work undertaken as part of the subsidence monitoring?**

NPWS staff did not (to my best recollection) review or witness work undertaken as part of the subsidence monitoring outlined in the Subsidence Management Plan.

Snowy 2.0 Team staff did visit the subsidence site on multiple occasions with Snowy Hydro representatives during 2023, 2024 and 2025 to view the sinkhole and subsequent rehabilitation works but these are not the subject of the Subsidence Management Plan.

**2. Who undertook the above work and what were their project role, experience, and qualifications?**

Nil response for subsidence monitoring work as per Q 1.

**3. Has NPWS been provided with copies of the results from the subsidence monitoring?**

NPWS has not received results from the subsidence monitoring outlined in the Subsidence Management Plan dated 5 Dec 2023.

NPWS did receive monthly drone survey reports on the sink hole from Feb to Nov 2023 – however these are not part of the Management Plan monitoring.

**4. Does NPWS have any concerns regarding the way the subsidence monitoring was undertaken?**

Nil issue, NPWS did not review or witness the monitoring. We relied on being notified of any potential issue in the event a TARP (Attachment 3) was activated.

**5. Any other commentary relating to the Tantangara Audit**

Nil

# Agency Questionnaire - FGJV

**1.Which organisation was tasked with establishing the settlement points and undertaking the subsidence monitoring?**

Establishing and Survey of the settlement points was conducted by the FGJV survey team. SHL survey team assisted with the Lidar scanning using drones.

**2.Who within that organisation did the work and what were their project role, experience, and qualifications?**

FGJV survey manager - David Ibbortson and Tantangara Survey Lead - Hugh McBride

SHL survey (drone capture only) - Sam Crafter

**3.Describe the process from the collection of the raw monitoring data to the presentation and assessment of the data**

Data was collected and processed by the FGJV survey team. Then the results were assessed and presented by the FGJV geotechnical team during daily Geotechnical Monitoring Meetings (GMM).

- FG survey team collected the survey readings from both within the tunnel and surface (via SHL drone team). This information was combined with the ongoing monitoring charts to present the trending data and provided to the FG geotechnical team.
- Daily during the Geotechnical Monitoring Meeting (GMM) the FG geotechnical engineers presented the data to the FGJV and SHL teams, and the data was assessed against the TARP triggers.
- If required actions were agreed in the meeting for the construction team to action and be captured in the daily Permit to Tunnel (PTT)

**4.Which organisation was tasked with reviewing and assessing the monitoring data?**

Review of the monitoring results was done jointly during the GMM jointly by FGJV, DJV, and SHL

FGJV was tasked with capturing, reviewing, and assessing the monitoring data daily and presenting this information in the daily GMM to SHL and DJV. SHL performed oversight of this process.

**5.Who within that organisation did the work and what were their project role, experience, and qualifications?**

Project design representatives, geotechnical engineers, and tunnel engineers.

Leads - Damiano Frontini, Geotechnical manager FGJV, and Ben Chapman Tunnel Geotech lead SHL

Geotechnical Engineers - Francisco Alvarado - Geotechnical Engineer FGJV and Kara Stariha - Geotechnical Engineer SHL

Tunnel Engineers - Shubham Sharma - Senior Project Engineer FGJV and Vikum Chathuranga - Senior Tunnel Engineer SHL

# Appendix C

# IEA Team Endorsement

# Appendix C IEA Team Endorsement

Department of Planning, Housing and Infrastructure

NSW Planning ref: SSI-9687-PA-350

Ms Nicola Fraser
Post Approvals
SNOWY HYDRO LIMITED

14/10/2025

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Subject: Snowy 2.0 - Main Works - Tantangara Subsidence Management Plan- Independent Audit Team endorsement - 2025

Dear Ms Fraser

Reference is made to your post approval matter, SSI-9687-PA-350, request for the Planning Secretary's approval of suitably qualified, experienced, and independent person/s to conduct the : Independent Audit of Tantangara Subsidence Management Plan for Snowy 2.0 - Main Works (CSSI 9687 the approval as modified).

This request was submitted in accordance with the requirements outlined in CSSI Approval Section 66, which states that the audit must:

(a) *be conducted by a suitably qualified, experienced and independent team of experts, including a lead auditor, whose appointment has been endorsed by the Planning Secretary;*

NSW Planning has reviewed the independent auditor nominations and based on the information you have provided is satisfied that the proposed audit team are suitably qualified, experienced, and independent.

Consequently, as nominee of the Planning Secretary, I approve the appointment of the proposed audit team from AECOM consisting of:

- Timothy Rannard (Lead + Technical Director: Engineering Geologist),
- Marco Rafanelli (Principal Geotechnical Engineer), and
- Alec Palmer (Project Manager).

Please ensure this correspondence is appended to the Independent Audit Report. The Independent Audit Report must be prepared, undertaken, and finalised in accordance with the conditions of approval and the Independent Audit Post Approval Requirements (2020).

Failure to meet these requirements will require revision and resubmission.

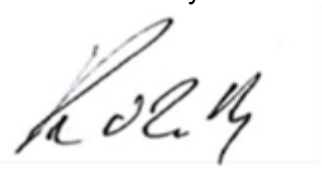
NSW Planning reserves the right to request an alternate auditor or audit team for future audits.

Please note:

- Any change to the auditor or auditor roles must be approved by the Planning Secretary prior to the audit commencing.
- The Lead Auditor must attend the site inspection component of the audit.
- The endorsed experts/specialists must attend the site inspection component of the audit unless otherwise agreed by the Planning Secretary.

Should you wish to discuss the matter further, please contact Michael Wood on 0459890661 or email compliance@planning.nsw.gov.au

Yours sincerely



Katrina O'Reilly
Team Leader - Compliance
Compliance
As nominee of the Planning Secretary