



AGL Energy Limited

T 02 9921 2999

F 02 9921 2552

[agl.com.au](http://agl.com.au)

ABN: 74 115 061 375

Level 24, 200 George St

Sydney NSW 2000

Locked Bag 1837

St Leonards NSW 2065

Katrina O'Reilly  
Team Leader – Compliance  
Department of Planning and Environment  
Level 16, 4PSQ  
12 Darcy Street  
Parramatta NSW 2150

BHB-AGL-HS-GEN-0136

28<sup>th</sup> August 2023

Dear Katrina,

**SSD – 11437498: Extended working hours bimonthly report (August 2023)**

AGL Energy Limited (**AGL**) received development consent under section 4.38 of the NSW *Environmental Planning and Assessment Act 1979* to construct the Broken Hill Battery Energy Storage System (**Project**) at Broken Hill, NSW on 8<sup>th</sup> September 2021. Following a request for modification of that development consent, revised conditions were granted by the Department on 15<sup>th</sup> July 2022 for SSD 11437498-Mod-1.

On 28<sup>th</sup> February 2023, the Department provided approval to undertake works as requested at the following times:

- Monday to Friday 7am to 6pm
- Saturday 7am to 6pm
- Sundays and NSW Public Holidays 8am to 1pm

As a condition of this approval, AGL provides a bimonthly report as requested, which includes details of works undertaken and complaints received. This is attached for your reference.

AGL intends to submit the next report by Friday 3<sup>rd</sup> November 2023.

AGL takes its regulatory compliance responsibility seriously and is committed to good environmental practice. If you require any further information, please do not hesitate to contact Vicki Brady, Senior Manager, Environment – Energy Hubs on [VBrady@agl.com.au](mailto:VBrady@agl.com.au) or 0499 304 473.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Hamid Shilani'.

Hamid Shilani  
Project Director – Broken Hill Battery Project  
m: 0405 588 922  
e: [hshilani@agl.com.au](mailto:hshilani@agl.com.au)



**BROKEN HILL BATTERY ENERGY STORAGE SYSTEM**

**OUT OF HOURS CONSTRUCTION WORK  
DPE BI-MONTHLY PROGRESS REPORT**

**29<sup>TH</sup> JUNE 2023 – 28<sup>TH</sup> AUGUST 2023**



## TABLE OF CONTENTS

<b>1</b>	<b>INTRODUCTION .....</b>	<b>3</b>
1.1	PURPOSE .....	3
1.2	SCOPE .....	3
1.3	ROLES AND RESPONSIBILITIES.....	3
1.3.1	Project Manager and Site Manager .....	3
1.3.2	Site Supervisors.....	3
1.3.3	Workers.....	3
1.3.4	HSE Manager.....	3
1.4	DEFINITIONS.....	4
1.5	REFERENCES .....	4
<b>2</b>	<b>PROGRESS REPORT – EXTENDED WORK HOURS .....</b>	<b>5</b>
2.1	COMPLIANCE CONDITIONS WITH EXTENDED WORKING HOURS .....	5
2.2	PLANT AND EQUIPMENT USED FOR EXTENDED CONSTRUCTION WORK HOURS AND NOISE ASSESSMENT .	5
2.3	OPERATIONAL CONTROLS.....	5
2.4	PROGRESS OF THE PROJECT.....	6
<b>3</b>	<b>COMPLAINT PROCESS FOR EXTENDED WORKING HOURS .....</b>	<b>6</b>
<b>4</b>	<b>CONCLUSION .....</b>	<b>6</b>
	<b>APPENDIX A – PLANT AND EQUIPMENT WORK BREAKDOWN STRUCTURE – NOISE SAMPLING AND CONTROLS .....</b>	<b>7</b>
	<b>APPENDIX B – REPORTING PERIOD CONSTRUCTION PROGRESS AND WEEKLY LOOKAHEADS .....</b>	<b>9</b>
	<b>APPENDIX B1 – CONSTRUCTION PROGRESS – 29 JUNE – 30 JULY .....</b>	<b>10</b>
	<b>APPENDIX B2 – CONSTRUCTION PROGRESS – 31<sup>ST</sup> JULY – 03 SEPTEMBER.....</b>	<b>11</b>
	<b>APPENDIX C – COMPLAINTS REGISTER.....</b>	<b>12</b>

## 1 INTRODUCTION

### 1.1 PURPOSE

To provide an *Out of Hours Work* (OOHW) Report to the Department of Planning and Environment (DPE) NSW every two months as specified in the approval letter which was received on the 28<sup>th</sup> of February 2023 by the DPE Director of Compliance.

The report is to detail the progress of the project and address any complaints received.

### 1.2 SCOPE

For construction work to be conducted from 7am to 6pm on Saturdays and 8am to 1pm on Sundays and NSW public holidays for work outside normal construction hours which is 6am to 5pm from Mondays to Fridays.

The increase is for the duration of the project.

### 1.3 ROLES AND RESPONSIBILITIES

#### 1.3.1 Project Manager and Site Manager

- Overall responsibility for the implementation, monitoring and management of the extended work hours strategy inclusive of noise, vehicle movements and fatigue management.
- Compliance with all *working hours* within the boundaries of the development approval and consent for the project.
- Compliance with all *conditions* applied for working hours and associated activities within the development approval and consent for the project.

#### 1.3.2 Site Supervisors

- Management of approved working hours within the prescribed time-frames.
- Management of all activities and noise controls within the prescribed time-frames.
- Management of vehicle movements and noise within the extended work hours.
- Evaluation and control of fatigue related risk factors with all workers on the project.
- Monitoring of compliance with noise and vehicle movements and evaluation of control measures.

#### 1.3.3 Workers

- Compliance with the Extended Work Hours noise generation controls and vehicle movements.
- Management of change with noise and vehicle movement factors with associated controls.
- Identifying and reporting any potential or actual breach with noise generating activities and associated agreed controls.
- Monitoring self and others with noise generating activities.

#### 1.3.4 HSE Manager

- Assist with the implementation of the Extended Work Hours Strategy.
- Evaluate, monitor and report effectiveness with Extended Work Hours Strategy.
- Assist with the management of any complaints, resolution, reporting and corrective actions from noise producing activities.

## 1.4 DEFINITIONS

Term	Meaning
BESS	Battery Energy Storage System.
dBA	Noise measurement in decibels.
dBC	Measure of the strength of an instantaneous signal at radio frequency . The dBC increment is based on the decibel, a logarithmic measure of relative signal strength.
DC	Development Consent. Approval and a license to operate for the project within the boundaries of the conditions within the DC.
EIS	Environmental Impact Statement
JHEA	Job Hazard Environmental Analysis
NMLs	Noise Management Levels within Construction.
OOHW	Out of Hours Work
PCBU	Person Conducting Business or Undertaking for or on behalf of an organisation. A person in control of the work environment.
Time Weighting Fast	125 metres per second in dBA and dBC
Time Weighting Slow	1 time per second in dBA and dBC
WBS	Work Breakdown Structure of Plant and Machinery Noise Levels.

## 1.5 REFERENCES

- BESS Development Consent - SSD-11437498 (as modified) – Schedule 3 condition 13 Construction, Upgrading and Decommissioning Hours
- SSD – 11437498: Request to Amend Construction Working Hours
- Broken Hill Battery Letter Extension of Working Hours BHB-AGL-CX-0040
- 4017-PLA-HSE-021 BESS Extended Work Hours Strategy and Noise Report
- BESS OOHW Approval Letter – DPE 28/02/2023
- 4017-PLA-HS-008 BESS Fatigue Management Framework Extended Work Hours
- Appendix A – Plant and Equipment Machinery Work Breakdown Structure – Noise Controls
- Appendix B – Reporting Period Construction Progress and Weekly Lookaheads
- Appendix C – Complaints Register

## 2 PROGRESS REPORT – EXTENDED WORK HOURS

The following project report outlines current progress within the project from the inception of OOHW.

The project consortium shall manage noise related risks associated with the approved project controls for OOHW in context with planning considerations within the project life cycle and associated operational controls as specified within the approved submission by the consortium being the *4017-PLA-HSE-021 BESS Extended Work Hours Strategy and Noise Report*.

### 2.1 COMPLIANCE CONDITIONS WITH EXTENDED WORKING HOURS

The following conditions have been met during this reporting period with implementing and communicating the OOHW conditions and associated controls being:

- Machinery used during OOHW will only involve a pad roller, grader, 20-tonne and 6-tonne excavators, skid steer loader, truck and dog trailer and water cart;
- No pile driving, jack hammering, use of air compressors and delivery of materials that may disrupt local roads will occur during the OOHW;
- A complaints register will be developed; and
- The Construction Environmental Management Plan will be updated to reflect the OOHW.

### 2.2 PLANT AND EQUIPMENT USED FOR EXTENDED CONSTRUCTION WORK HOURS AND NOISE ASSESSMENT

A detailed listing of equipment used within this reporting period for extended work hours and associated construction noise assessments from an initial baseline survey is detailed in *Appendix A – Plant and Equipment Work Breakdown Structure – Noise Controls*, and includes the following plant and equipment:

- 6 Tonne Excavator;
- 25 Tonne 320 Cat Excavator;
- Skid Steer Loader;
- Pad Roller;
- Truck and Dog Trailer; and
- Water Cart.

### 2.3 OPERATIONAL CONTROLS

The following operational controls have been established within the Extended Work Hours Strategy and Framework for implementation, monitoring, evaluating and controlling, which includes:

- Duties of a PCBU and persons in management and control of a workplace to understand and apply such duties as required by section 20 of the NSW WHS Act, inclusive of extended hours obligations and associated conditions.
- Noise generating activities and controls defined daily and weekly with operational controls documented on the Job Hazard Environmental Analysis (JHEA) with noise activities and monitored for compliance.
- Wind factors evaluated and monitored daily to establish wind direction, noise carry and associated controls.
- Noise assessments conducted for peak periods or noisy equipment to confirm boundary noise compliance.
- Controls with noisy activities complied with for Saturdays, Sundays and Public Holidays. Refer to *Section 2.1 Compliance Conditions with Extended Working Hours* of this report.

## 2.4 PROGRESS OF THE PROJECT

The reporting period includes Construction Weekly Lookaheads and overall progress with construction works and OOHW activities. Refer to *Appendix B – Reporting Period Construction Progress and Weekly Lookaheads*.

## 3 COMPLAINT PROCESS FOR EXTENDED WORKING HOURS

A complaint process has been established as detailed in the:

- 4017-PLA-GE-002 - Stakeholder Management Plan; and
- 4017-PLA-GE-003 - Regulatory Compliance Plan.

**To confirm no complaints have been submitted within this reporting period for OOHW.**

All complaints are formerly submitted within the Altrad Information Reporting (AIR) System and events recorded in the Project Complaints Register. Refer to:

- *Appendix C – Complaints Register*

## 4 CONCLUSION

The controls established for OOHW with construction activities have been communicated with the project workforce and integrated within the *4017-PLA-HS-008 BESS Fatigue Management Framework Extended Work Hours*.

Controls for OOHW activities are monitored and evaluated daily and weekly with operational controls which are documented and detailed within the workgroups *Job Hazard Environmental Analysis (JHEA)* which are formerly reviewed and RESET each Monday by each workgroup.

All JHEAs are aligned to Safe Work Method Statements, Permit to Works and are handwritten, verified, and approved by the Principal Contractor Valmec Australia Site Manager and Site HSE Manager to manage risk, opportunity and change.

Such documentation is also verified daily by the onsite AGL client representative.

Oversight is also provided 3 weekly by the AGL HSE Manager for Energy Hubs who attends site to verify HSE activities and supports any project requirements proactively.

To date there has no zero noise or disturbance complaints received by Valmec on this AGL Broken Hill BESS Project.

Valmec Australia submits this report for OOHW and encourages any feedback from the Department of Planning and Environment to ensure the project is meeting all obligations as specified.





**APPENDIX A – PLANT AND EQUIPMENT WORK BREAKDOWN STRUCTURE – NOISE SAMPLING AND CONTROLS**

Activity	Equipment	Location	dBA Time Weighting Measurement Fast	dBA Time Weighting Measurement Slow	Comments
Boundary Noise Measurements with all plant and equipment operating within Construction Footprint.	<ul style="list-style-type: none"> <li>6 Tonne Excavator</li> <li>25 Tonne 320 Cat Excavator</li> <li>Skid Steer Loader</li> <li>Pad Foot Roller</li> <li>Truck and Dog Trailer</li> <li>Water Cart</li> </ul>	North Boundary - Central Reading	51.1 dBA	50.3 dBA	Equipment and activities were focused on Area 1 of BESS at the time of the survey which is the North Eastern Half of Stage 1.  The Pad Foot Roller and Water Cart were operating centrally to the project.
		North West Corner Boundary Reading	48.2 dBA	50.4 dBA	
		North East Corner Boundary Reading	64.9 dBA	72.4 dBA	
		East Boundary - Central Reading	68.9 dBA	60.0 dBA	
		South East Corner Boundary Reading	51.4 dBA	51.7 dBA	
		South Boundary - Central Reading	49.9 dBA	53.2 dBA	
		South West Corner Boundary Reading	47 dBA	50.5 dBA	
		West Boundary – Central Reading	47.9 dBA	50.5 dBA	
Boundary Noise Measurement from Outside of Construction Footprint.	All equipment in operation.	Outside of eastern Boundary 15 metres from Construction Fence line on North Eastern Side and eastern Side.	59.6 dBA 57.4 dBA	66.3 dBA 61.7 dBA	First Reading Taken on North Eastern side of boundary.  Second Reading Taken Eastern Side of Boundary Centrally, with 6 Tonne Excavator reversing.





**AGL – Broken Hill BESS Project**  
**Out of Hours Construction Work Bi-Monthly Report**



Activity	Equipment	Location	dBa Time Weighting Measurement Fast	dBa Time Weighting Measurement Slow	Comments
Earth Grid Trenching	6 Tonne Excavator	South East of Area 1.	69.1 dBA 78 dBA (Reversing)	73.9 dBA 80 dBA (Reversing)	Reading taken 8 metres from Excavator Operating. Second reading with Excavator reversing with Squawker on.
Excavations for Control Room	25 Tonne 320 Cat Excavator	North East Corner of Area 1.	65.4 dBA	74.1 dBA	Reading taken 12 metres from Excavator Operating on N/E Corner Boundary.
Installing Bedding Sand in Trenches	Skid Steer Loader	South East of Area 1.	67.7 dBA 74.5 dBA	70.0 dBA 77.8 dBA	First reading taken 6 metres from operations. Second reading taken 2 metres from operations.
Pad Foot Rolling Operations with Vibration on	Pad Foot Roller	Operating North to South in Stage 1 Area 2.	76.9 dBA 76.0 dBA	82.3 dBA 79.0 dBA	First reading taken 2 metres from operations. Second reading taken with Vibration on 4 metres from operations.
Bedding Sand Delivery	Truck and Dog Trailer	Operating North to South Stage 1 in Area 2.	63.8 dBA	67.4 dBA	Reading taken 4 metres from operations.
Water Cart Operations	Water Cart	Operating North to South Stage 1 in Area 2. Hand watering in area 1, due to limited access.	51.6 dBA	53.8 dBA	Reading taken 4 metres from operations.



## APPENDIX B – REPORTING PERIOD CONSTRUCTION PROGRESS AND WEEKLY LOOKAHEADS

The following construction schedules outline activities with project progress aligned with OOWH conditions and include the following periods:

- 29<sup>th</sup> June – 30<sup>th</sup> July
- 31<sup>st</sup> July – 03<sup>rd</sup> September



# AGL – Broken Hill BESS Project

## Out of Hours Construction Work Bi-Monthly Report



### APPENDIX B1 – CONSTRUCTION PROGRESS – 29 JUNE – 30 JULY

Revision to <b>30 th JULY 2023 rev 8 Friday</b>				Current	lookahead 1 week 40	lookahead 2 week 41	lookahead 3 week 39																																
Item	ZONE	Major Event	VP#	Task	Detail	start	end	s	s	m	t	w	t	f	s	s	m	t	w	t	f	s	s	m	t	w	t	f	s	s	m	t	w	t	f	s	s		
				Upgrade temp swate to south boundary and maintain same	close south entry point	0	100																																
##	STAGE 2	Transmission Corridor		Update detailed drawings to IFC	confirm drg IFC	0	80																																
##		Complete Project		Complete trench constructability review	0.75 TR in conduits	45	45																																
##				Assemble Project area remediation and revegetation plan	Draft dependant on response	0	0																																
##				Review and update Site Controls and Environmental ITP	ongoing	75	0																																
##				Submit IFC for review- AGL, Essential, Transgrid, MISI	Exclusion Zone t/b included	75	0																																
##				Reset sediment controls on south fence line of old Project Area	On HOLD 24/4	0	0																																
##				Remove North temp fence and remediate area of original Project Area.	risk assessment reqd																																		
##				Remove Southh temp fence and remediate area of original Project Area.	Contact DPE																																		
##		ENABLING WORKS		Re - Engage RAP representatives onto site																																			
##				Excavate trench (rough out) into 22kv Switchyard and install conduits																																			
##				Document and lodge application for excavation permit extention																																			
##				Setup earth cable reeler and layout HDPE fiber duct																																			
##				Complete approvals with Essential Energy for trench proximity.																																			
##				Form up Haul Road cut and fill profiles incl thru pond																																			
##				Continue pot holing and earthgrid identification																																			
##				Final route elevations and compaction to same.		0	0																																
##				Superintendent of works to lead Kickstart meeting	Daily Event ongoing	10	0																																
##				Recheck 1st order creek spillways are clear	high priority	65	0																																
##				Survey first trench location and markout		0	0																																
##				Stockpile excess excavated pond material inside project area for reuse.																																			
##				Recheck all signage and barriers	Daily Kickstart meetings	0	0																																
##		TRENCHING WORKS	Zone 1	Excavate trench and cart spoil to Tip thru DR19	12 meter start																																		
##				Place earth cable and First 150mm layer of Sand bedding		0	0																																
##				Lay out/ Install prespooled conduit stringers and glue																																			
##				Ascon Survey		0	0																																
##				Place hard barriers/ bedding materials /Fibre duct	Spoil off site	0	0																																
##				Final survey and replacement of topsoil from windrow		0	0																																
##				Inspection for compliance with drawings																																			
##		TRENCHING WORKS	Zone 2&3	Setup earth cable reeler and layout HDPE fiber duct		50	0																																
##				Excavate trench and cart soil thru DR21		0	0																																
##				Place earth cable and First 150mm layer of Sand bedding	Bill to survey all																																		
##				Lay out/ Install prespooled conduit stringers and glue																																			
##				Monitor equipment type for area restrictions	OH power cables are extreme	0	0																																
##				Return pond to operational mode and gain signoff																																			
##				Inspection for compliance with drawings																																			





