Meeting notes

EnergyAustralia

Project	EnergyAustralia Lithgow CCC	**Date**	7 December 2022
Chair	Brendan Blakeley	**Recorder**	Ella Burgess
Attendees	Julie Favell, CCC member, left meeting at 6pm. Rob Cluff, CCC member Cr Maree Statham, CCC member (partial attendance online) Lauren Stevens, CCC member (online attendance) Rob White, CCC member Ray Smith, Observer Justin Courmadias, EnergyAustralia Steve Marshall, EnergyAustralia Mick Hanly, EnergyAustralia Peter Griffiths, EnergyAustralia (attendance online)	**Apologies**	Jim Whitty, CCC member Alex Preema, CCC member Clr Cass Coleman, CCC member Aunty Helen Riley, CCC Member Ben Eastwood, EnergyAustralia

Item	Discussion Point	Actions
1.	**Welcome and introductions** – The meeting began at 5.04pm. – The Chair welcomed all members and acknowledged Country and noting new members. – The Chair ran through the agenda for the meeting and noted apologies.	
2.	**Review of previous meeting minutes** – The Chair called for comments on the previous meeting minutes. – No comments were noted, the meeting minutes were adopted. **Actions from Previous Meeting** *A review of the fire risks associated with the pine-tree grove at Pine Dale Coal Mine.* *See slides 6-12 of the presentation.* – The commitment was made to undertake a risk assessment of the pine-tree grove at Pine Dale Mine. – The pine-tree grove at Pine Dale Coal Mine is an 11 Ha area located adjacent to the Castlereagh Highway and Blackmans Flat. – The fire risk assessment has been defined as potential bushfire threating people, property and livestock. – A Risk Assessment of the area has been undertaken using existing EnergyAustralia Risk Assessment procedures.	

Item	Discussion Point	Actions

	– The Risk Assessment looks at the likelihood of occurrences and the consequences, taking into account a range of risks from almost certain to improbable and the consequences of that scope.
	– The Risk Assessment identified numerous controls currently in place including:
	  – NSW Remote Bushfire training school and helicopter landing area
	  – Large nearby bodies of water including Blue Lake and Western Coal Services Dam
	  – Permanent firebreaks
	  – Good vehicle access to all sides of the pine-tree grove
	  – Good exits away from the grove for people, vehicles and livestock.
	– The Risk Assessment identified that the residual risks from a bushfire in the pine-tree grove were low with the existing controls in place. However, it was noted that the residual risk of threat to property was high, although it is unknown what fire controls private landowners have in place.
	– *The CCC member thanked the EnergyAustralia team for completing the Risk Assessment, after repeated asking over the last 18 months see previous minutes. It was noted that at the time of the last bushfire, there was no RFS and that personal property was at risk as the fire jumped the hall road. CCC member gave full details of their fire risk plan: Agricultural sprinklers and 150 metre fire house. There were no resources given the megafire presenting. The only reason that the home did not burn was reduced wind with a slow burn but still managed to jump the haul road into back paddocks. This is still remains a fire risk given the unprecedent previous and future fires.*	

3.	**Site safety** *See slides 14 and 15 of the presentation* – It was noted that 2022 has not been the best year for Mt Piper from a safety point of view. There have been several near misses over the year and a number of smaller incidences. – It was noted that following the long lockdown, personnel coming on site for the outage meant that they were not performing at their optimum, however that cannot be accepted as an excuse. It was noted that there is behavioural work to be done and leadership-based safety programs. – The total injury frequency rate target is 4.73, however the actual to date is 9.20.	

4.	**Water management**
	See slides 17 and 20 of the presentation
	– Oberon Dam level is at 100%
	– Total active storage is at 94.7% with:
	  – Lake Lyell at 96%
	  – Lake Wallace at 108.3%
	  – Thompsons Creek Dam at 92.2%
	– No algae alerts.
	– The controlled release of water from Thompson Creek Dam is ongoing for water level management.
	Steve gave an update on Lake Lyell Environmental Flows.
	– *A CCC member commented that Lake Lyell was flooding three weeks ago and is now at 96% full.*
	– Steve noted that this was in preparation for planned maintenance on the concrete wall.	

Item	Discussion Point	Actions
	– He explained that each time Lake Lyell reaches a new high, a white alert must be issued followed by an increased inspection regime to ensure that nothing has happened because of the flow. – The team was in the process of dropping the level following the last period of intense rain, however additional rain shortly after caused another overflow. – He noted that the Dam Safety Act which passed four years ago changed the responsibilities of those who own and operate the dams. If the dams aren't managed appropriately, there could be legal action. EnergyAustralia spends approximately $1.8 million each year on dam surveillance and monitoring. – The Chair noted that EnergyAustralia has to notify stakeholders downstream of Lake Lyell when managing the water levels. – *A CCC member asked if the planned maintenance is planned well in advance as Lake Lyell is about to come into its peak operating time recreationally and dropping the water level is not ideal.* – Steve responded that safety is paramount and while management regimes for the dam seeks to accommodate recreational use, regular inspections and maintenance work take priority. – *A CCC member asked what EnergyAustralia's position on feral animals is. It was noted that there are substantial comments made within the community about the feral animals around Lake Lyell. TAKEN ON NOTICE* MPPS Water Usage *See slide 19* – Steve noted that with the way the market is, the team are in intermittent operation for both Autumn and Spring. – *A CCC member commented that issues will arise in 2029 if the pipeline goes through.* – Steve responded that their water license to take water for MPP is combined with Wallerawang, however Wallerawang is not currently their focus. Thompson Creek Reservoir – Emergency water discharge *See slide 20* – High rainfall since June 2022 has increased water levels in the Thompson Creek Dam to full supply. – Under the Dam Safety Act, Pipers Flat Emergency Water Discharge valve was built to reduce water in Thompson Creek Reservoir. – EnergyAustralia submitted a license variation to the EPA to support the temporary water discharge for 30 days. – Discharge commenced on Monday 14 November and was stopped on Monday 5 December.	
5.	**Market update** *No notes were taken due to the commercially sensitive nature of the content.*	
6.	**People** *See slide 26 of the presentation.* – EnergyAustralia held an apprentice information session, it was encouraging to see large numbers in attendance. – There were 87 apprentice applications compared to 28 last year, for 7 positions. – It was noted that cyber security is also an increasingly prevalent growth area. In 2023, EnergyAustralia will look to hire trainees in that area as well. – A CCC member asked if the jobs mentioned will be future jobs for the battery and if existing jobs on site will equate with the battery. – Mick confirmed existing jobs would be in place if the trade is applicable. EnergyAustralia is committed to ensuring their people are future fit.	
7.	**Lamberts North Ash Placement project**	

Item	Discussion Point	Actions
	See slide 28 Between February 2022 and October 2022 - Zero complaints have been received - No material environmental incidents have been reported - The Operations Environmental Management Plan has been approved by the Department of Planning and Environment - The Leachate Barrier Management System has been successfully installed in Area 1A and is receiving brine conditioned ash - Progressive installation of the leachate barrier system will continue into Area 2.	
8.	**Community update** *See slide 30 of the presentation* - Round 2 community grants have been awarded. - EnergyAustralia has supported over 6 community events. - EnergyAustralia participated in Empower Me – ABCN, a mentoring session with students from Lithgow High School. - Peter Griffiths, Donna Field and Jennifer Cordina attended the Black Rose Business Awards on behalf of EnergyAustralia.	
9.	**Lake Lyell Pumped Hydro Energy Storage** *See slide 37 of the presentation.* - Geotech studies are currently underway, having commenced in September with an aim of concluding in February 2023. - Once the Geotech data is made available, the engineering design is expected to commence in early 2023. - It was noted that EnergyAustralia would be conducting more information sessions on various chapters of the EIS in January 2023. - A survey of those who use the lake for recreational purposes during Summer will also be conducted. - The Scoping Report to inform the EIS is underway. - The expectation is that this is a generational project and the intent is to create long term community benefit. Through community consultation and engagement, the team are working towards an outcome that will have the biggest benefit for the local community in Lithgow. - Stakeholder engagement is ongoing and will continue on the impacts, mitigations and opportunities for benefits sharing to be a strong focus throughout 2023. - The Chair outlined the EIS and SEARs process, which can be found here - https://pp.planningportal.nsw.gov.au/major-projects/assessment/state-significant-infrastructure/ssi-process/prepare-eis	

Item	Discussion Point	Actions
	- The Chair noted that it is a requirement for the CCC to be kept up to date throughout the EIS process. - The Chair suggested that the group determined some particular issues of interest about the Lake Lyell project. This way detailed presentations can be arranged for future meetings. - *A CCC member asked how public the results of the Geotech studies will be.* - It was noted the studies would not be made public. - *A CCC member asked if the engineering design will be more detailed than the concept design.* - Steve answered that the Geotech results show what the project team needs to understand as well as the water transfers from the upper reservoir back down the lake and how that impacts the water level. The EIS would yield a much more detailed design along with numerous studies to support assessment of the proposal. - *A CCC member asked who the stakeholders are.* - The Chair answered that the SEARs will specify who the stakeholders are and who EnergyAustralia needs to consult with. - *A CCC member commented that the access tracks used for the Geotech studies changed, and there was no consultation with the community. It was noted that sort of action raises a lack of trust in EnergyAustralia from the local community because people cannot rely on being told what is going on.* - Mick responded that signage has been put around the access points to the tracks to advise non-local people about construction access arrangements. - *A CCC member noted that EnergyAustralia really needs to prioritise openness and transparency, otherwise the community will be lost.*	

10.	**Project in focus – Mt Piper Battery Energy Storage**
	See slides 41 – 46 of the presentation
	– Batteries are a large part of EnergyAustralia's portfolio as they are increasingly focussing on flexible capacity projects. With more renewables in the system, there is a need to be able to manage the energy peaks and drop offs.
	– Batteries typically run for approx. 1 – 4 hours, compared to pumped hydro which runs for approx. 4 – 8 hours.
	– Potential connection options are 330kV and 500kV connections.
	– The substation will be owned by Transgrid.
	– The proposed site is Mt Piper because:
	  – there is access to an existing substation without the need for transmission lines across private lands
	  – they will be utilising unused land within existing EnergyAustralia landholding
	  – there is existing site access
	  – there will be limited visual and amenity impact.
	– The services that battery developments provide include:
	  – storage of surplus energy generated during periods of low demand
	  – stored energy being released back into the grid during periods of high energy demand or constrained supply
	  – providing security of supply as the penetration of renewables increases
	  – supporting reliable operation of a power grid with a higher share of renewable energy.
	– *A CCC member asked if the energy output would be the same as pumped hydro.*
	– Justin confirmed that it's the same energy that comes out and the plan is to look at storage of up to 500MW.
	– Environmental considerations of battery energy storage will be explored as part of the EIS and will include detailed assessments of traffic, noise, hazards and socio-economic and heritage impacts.	

Item	Discussion Point	Actions
	– The Scoping Report is currently under review. – Initial stakeholder engagement has commenced and a detailed consultation plan will be rolled out to support the EIS and public exhibition process.	
11.	**Next steps** - The Chair suggested that meetings do not occur on Mondays due to Council commitments. - ACTION: Council to supply dates they cannot attend in 2023 to ensure in person attendance for meetings in 2023. The meeting closed at 6:56pm.	

Additional resources requested during the meeting:

Aggregated price and demand data, to build spreadsheets etc. on max capacity and averages etc. Can build an intra day duck curve from these.
https://aemo.com.au/energy-systems/electricity/national-electricity-market-nem/data-nem/aggregated-data

Nemwatch site and app
https://www.nem-watch.info/widgets/reneweconomy/

EnergyAustralia Lithgow Region

Community Consultative Committee

7 December 2022

Steve Marshall – Head of Mt Piper

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Acknowledgement of Country

I would like to acknowledge the Wiradjuri people as the Traditional Owners of the land on which we meet today, and pay my respects to their Elders past, present and future

Artwork by Wiradjuri Elder and Mingaan Wiradjuri Aboriginal Corporation representative Aunty Sharon Riley

Agenda

1. Welcome and introductions
2. Actions from Previous Meeting
3. Site Update from EnergyAustralia
4. Project Updates – Pumped Hydro
5. Project in Focus - Battery Energy Storage
5. General Discussion
6. Meeting Close

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Welcome and Introductions

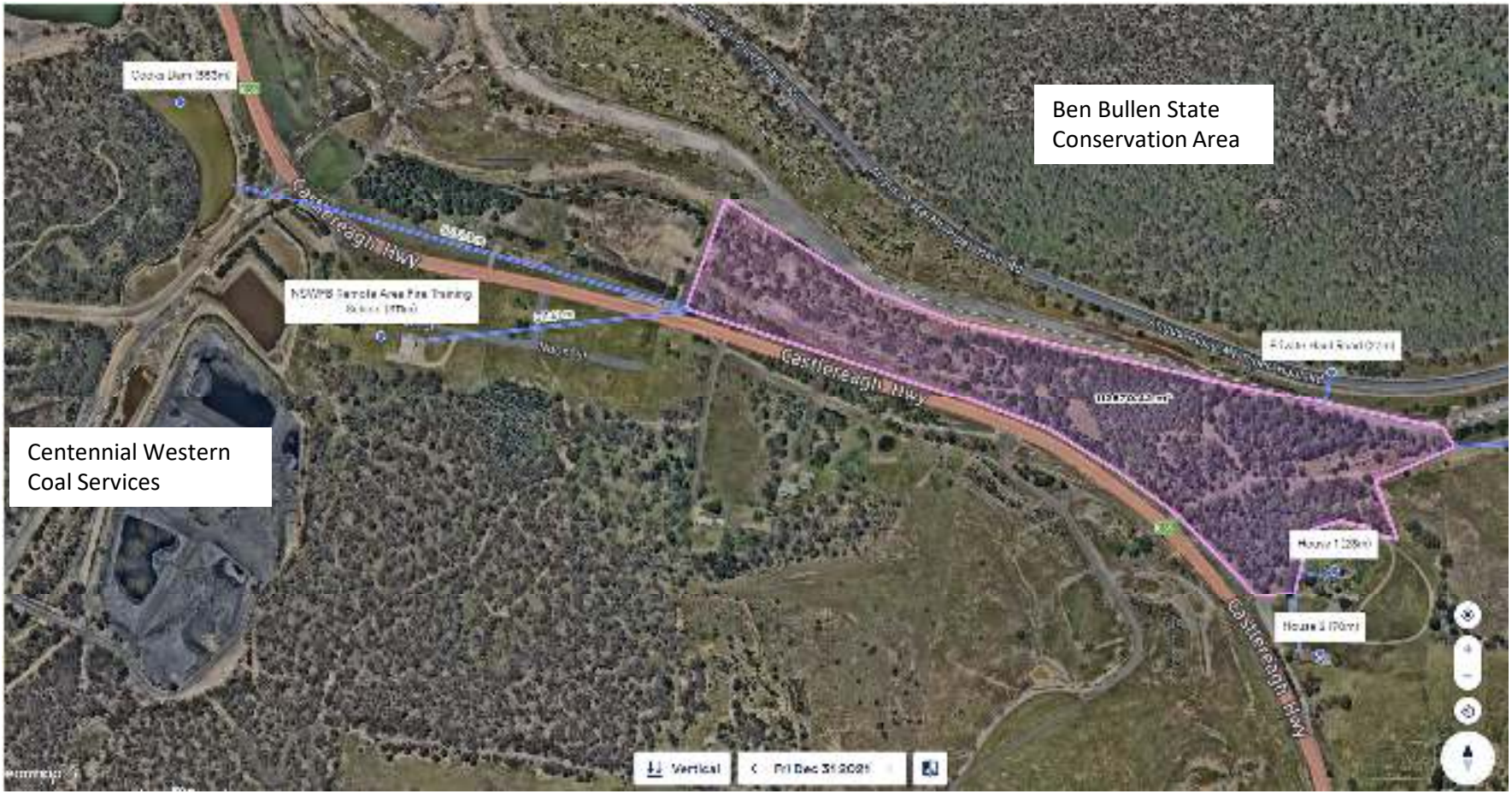
Actions from Previous Meeting

A review of the fire risks associated with the pine tree grove at Pine Dale Coal Mine

Background

- Question raised by CCC member regarding potential threat from fire in the pine-tree grove at Pine Dale Coal Mine
- Pine-tree grove defined as area covering 11 Ha located adjacent the Castlereagh Hwy, Blackmans Flat as shown by purple line in figure
- Scope of fire risk assessment has been defined as: bushfire in pine-tree grove at PDM that threatens people, property and livestock
- The methodology used was a Risk Assessment (RA) approach using existing EnergyAustralia Risk Assessment procedures and tools including Management of Technical Change (MOTC)
    - Comprehensive and proven procedures and tools for assessing risk;
    - Allows risk to be quantified
    - MOTC three step RA (inherent risk, residual risk, residual risk (after change)

General layout and features



General layout and features

Current controls

- NSW Remote Bushfire training school and helicopter landing area located 300m away in Blackmans Flat
- Access to water from ‘Blue Lake’ (747m) and Western Coal Services Cooks Dam (553m)
- Permanent firebreaks in place created by;
  - Castlereagh Hwy to south
  - PDM haul Road to north
  - Private Coal Haul Road to north
- Good vehicle access to all sides of the pine-tree grove
- Extensive land clearing to the east, south and west
- Good exit pathways via roads and cleared land for vehicles, people and livestock to move away from the pine-tree grove in the event of a bushfire

Distances (approximate)

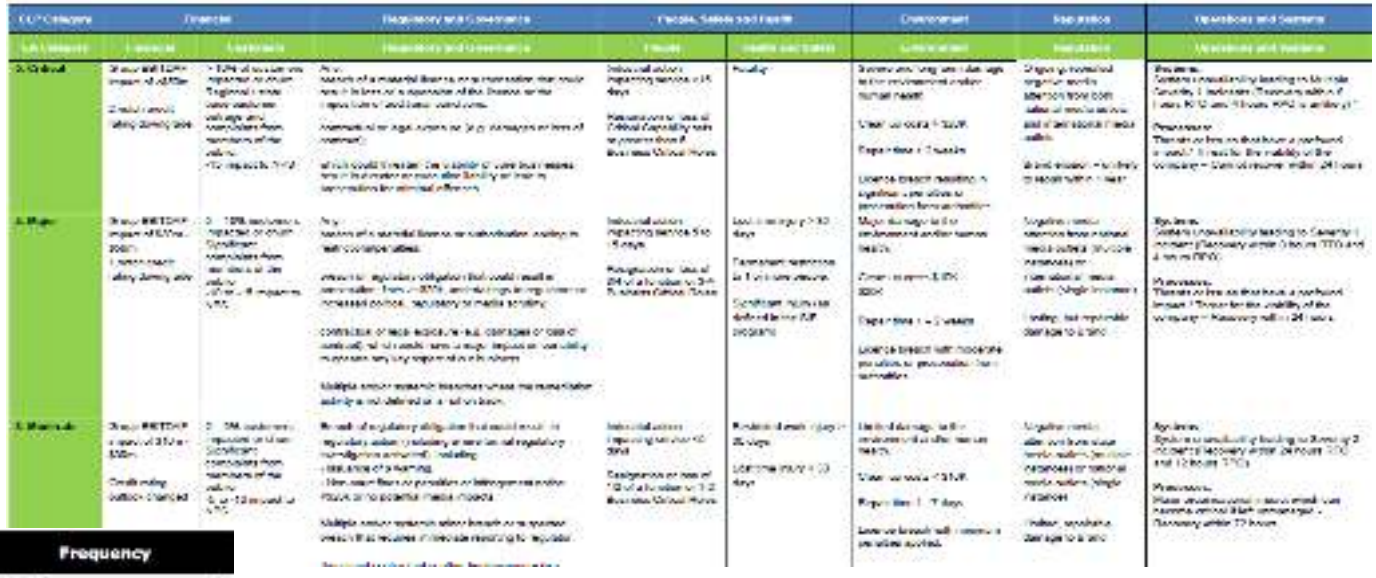
- 10m to PDM haul road
- 25m to Castlereagh Hwy
- 27m to Angus Place private coal haul road
- 23m to house 1 (Barnes)
- 70m to house 2 (Favell)

Risk Assessment

Key aspects

- Enterprise
  - Risk Consequence Materiality Table
  - Risk likelihood table
- Management of Technical Change spreadsheet

Risk Consequence Materiality Table - Enterprise

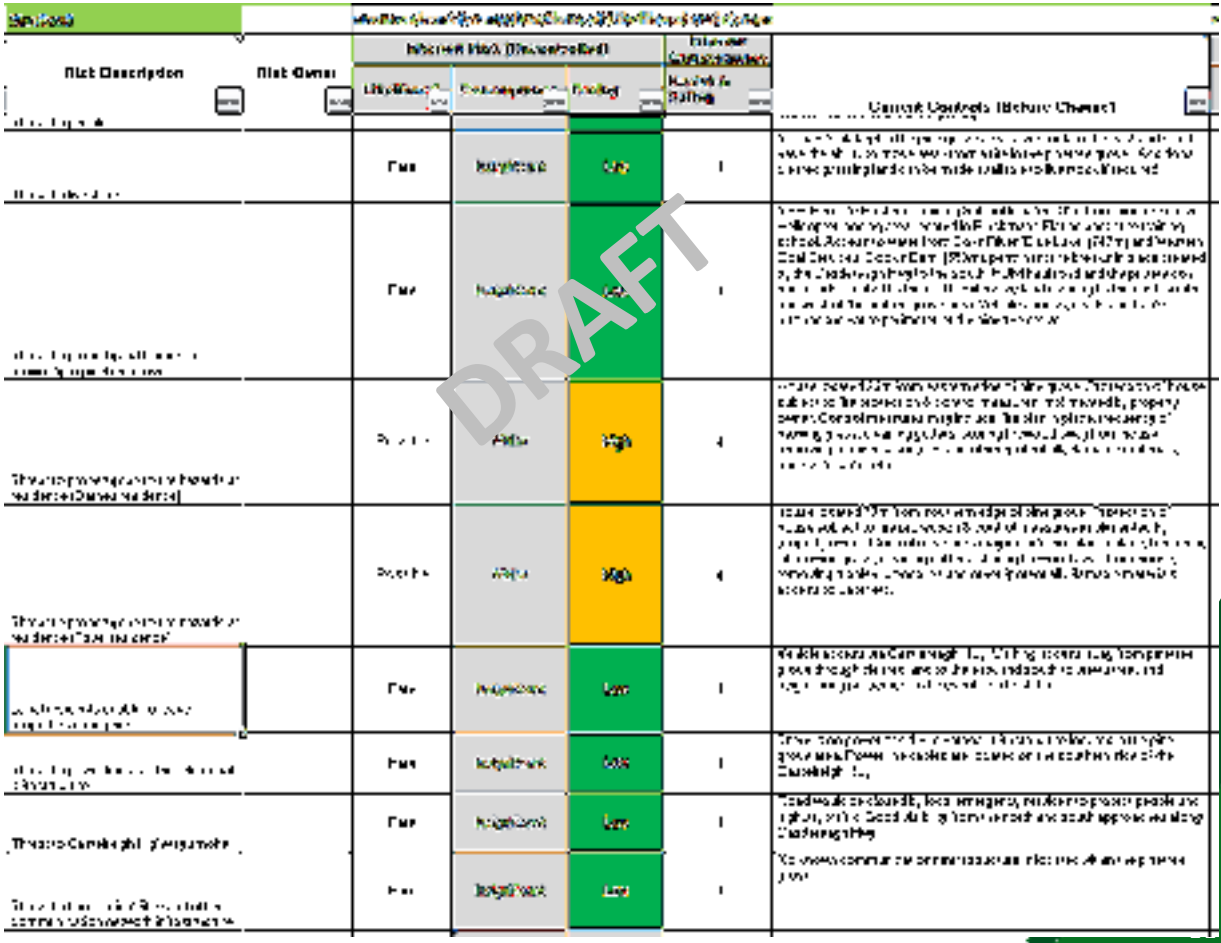


Level	Qualitative Measure	Probability	Frequency
	<----------Used to measure Business Risk Likelihood---------->		
	<---- Program/ Project Risk Likelihood---->		
Almost Certain	Already happen or is expected to occur in most circumstances	90% or greater chance of occurrence	Once per month or more
Likely	May probably occur in most circumstances	66% up to 99% chance of occurrence	Once per year up to once per month
Possible	Not unusual and might occur in the foreseeable future	33% up to 66% chance of occurrence	Once in 3 years up to once per year
Unlikely	Could occur at some time but unlikely in the foreseeable future	10% up to 33% chance of occurrence	Once in 10 years up to once in 3 years
Rare	Is expected to occur only in exceptional or extreme circumstances	Less than 10% chance of occurrence	Less than once in 10 years

Outcomes of Risk Assessment

Description of Risks

- Threat to people, livestock, property, homes in close proximity to pine-tree grove, electrical and communications infrastructure
- The residual risk for most of the risks assessed were low with the existing controls in place
- The residual risk for 'threat to property' due to fire hazards at the residence was considered high. It's unknown what fire preparedness and controls are in place by private landowners

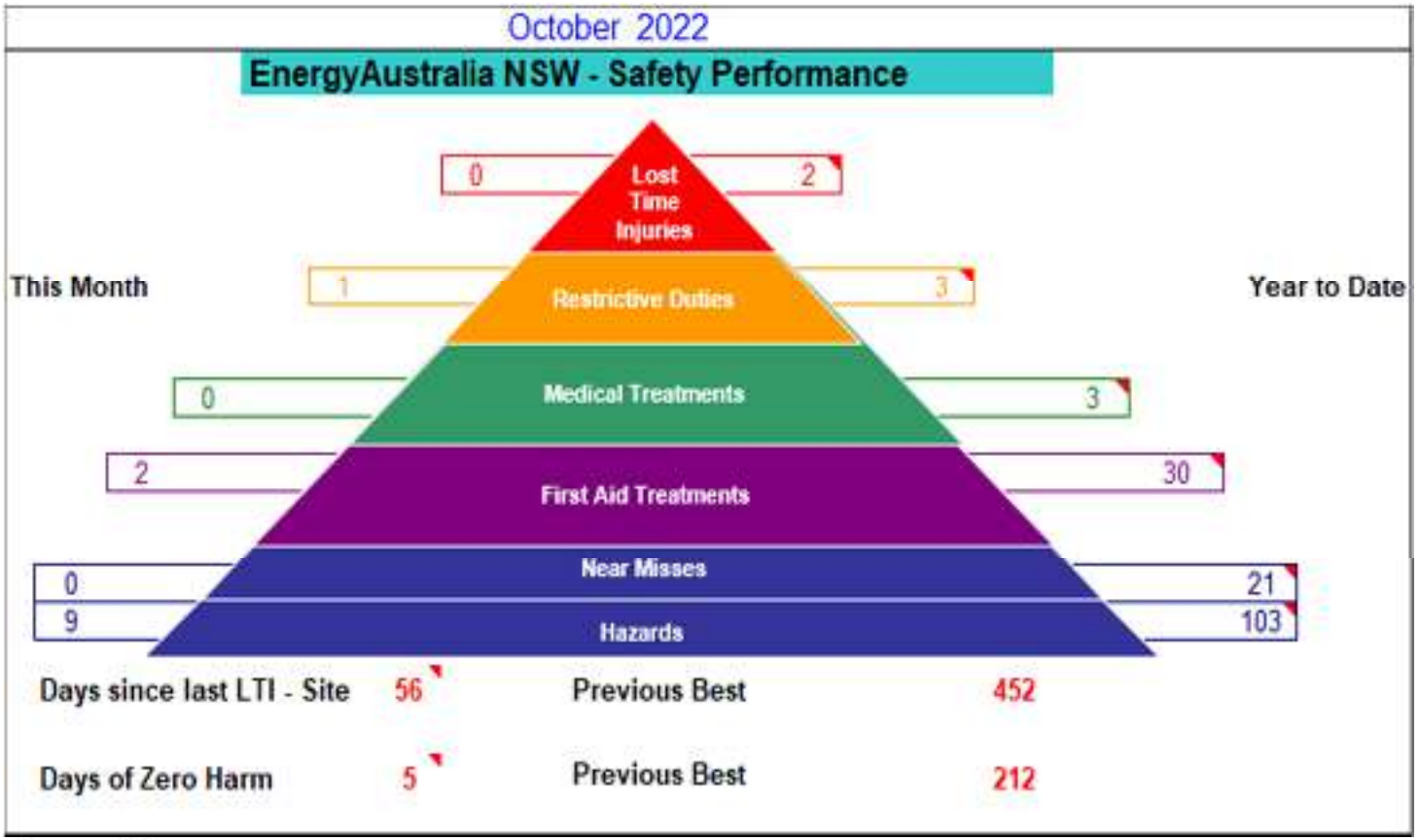


Conclusion

- The pine tree grove provides a visual screen from the Castlereagh Hwy
- The closest resident does not want any trees in the pine tree grove removed as they provide a privacy and noise screen from traffic on the Castlereagh Hwy
- The pine tree grove at PDM does not appear to be identified as a specific area of concern in the Lithgow RFS Bushfire Management Plan
- The existing controls in place appear to be adequate (as assessed) to protect against threats to people, property and livestock
- Removing a few individual pine trees in the pine tree grove will not materially change the fire risk profile, the fire risk to people, property and livestock is already assessed as being low
- Landowners should be encouraged to review their bushfire preparedness and response plans

Site Safety

Site Safety – 2022



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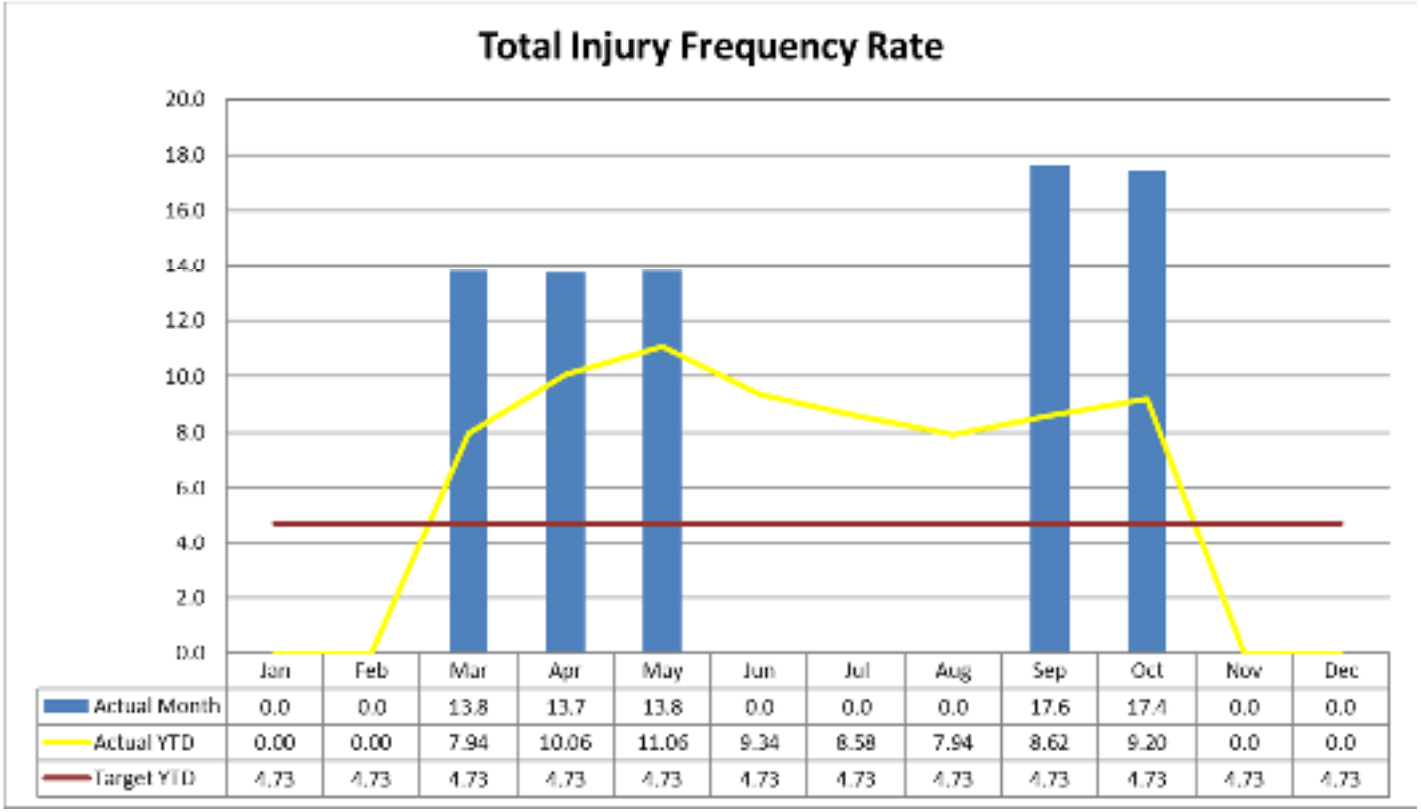
Site Safety

YTD – TIFR (As of 31st October 2022)

Actual = 9.20

Target = 4.73



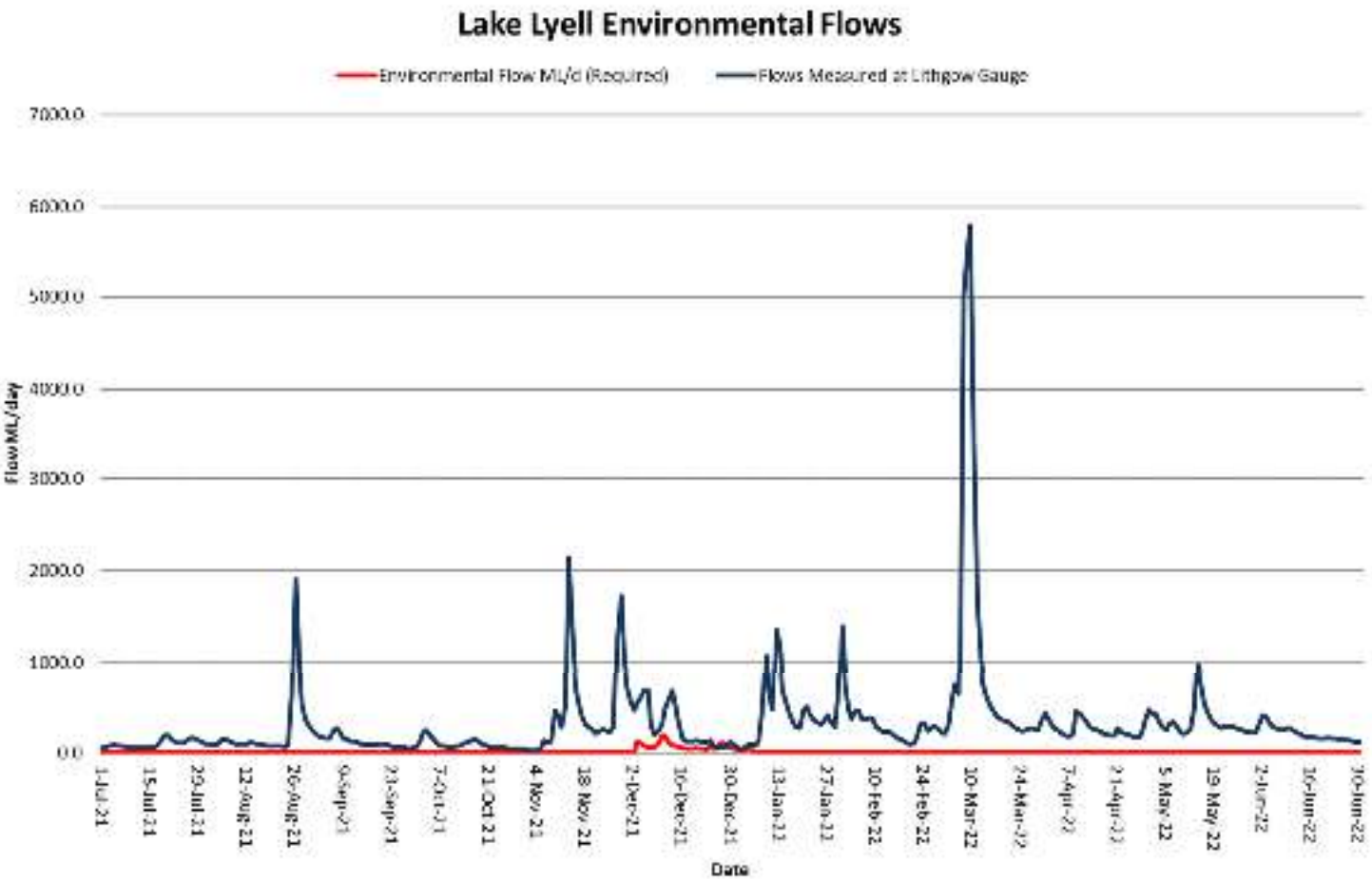
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Actual Month	0.0	0.0	13.8	13.7	13.8	0.0	0.0	0.0	17.6	17.4	0.0	0.0
Actual YTD	0.00	0.00	7.94	10.06	11.06	9.34	8.58	7.94	8.62	9.20	0.0	0.0
Target YTD	4.73	4.73	4.73	4.73	4.73	4.73	4.73	4.73	4.73	4.73	4.73	4.73

Water Management

Update on Water Management

- Oberon Dam level is at 100%
- Total Active Storage is at 94.7% with:
  - Lake Lyell at 96.0%
  - Lake Wallace at 108.3%
  - Thompsons Creek Dam at 92.2%
- No algae alerts
- Controlled release from TCR is ongoing for level management

Lake Lyell Environmental Flows



- Lake Lyell flows were above the required volume for the majority of the reporting period
- 8 occurrences where flows exceeded the 800ML/d flow event trigger
- The max flow recorded was just below 6000ML/d

MPPS Water Usage

- The total water usage at MPPS was **6,685 ML** for the 21-22 reporting period. Compared to **11,465.6 ML** in 20-21 a decrease of **41.7%**
- Springvale Mine water made up **74%** of the total water used at MPPS in 21-22
- 2029.7 ML was sourced from the water catchments (Coxs River and Fish River)

Month	Coxs River# (ML/ month)	Fish River (ML/ month)	Springvale Mine (ML/ month)	Total Water Usage (ML/ Month)	Average Daily Extraction for Month (ML/day)
Jul 2021	168.3	37.2	842.8	1048.3	33.8
Aug 2021	102.7	51.7	602.6	757.0	24.4
Sept 2021	72.9	70.9	224.5	368.3	12.3
Oct 2021	67.0	35.1	302.9	404.9	13.1
Nov 2021	96.4	50.4	216.0	362.8	12.1
Dec 2021	70.5	26.7	146.5	243.6	7.9
Jan 2022	152.3	57.5	433.9	643.8	20.8
Feb 2022	102.6	40.5	481.4	624.5	22.3
Mar 2022	48.4	41.0	251.7	341.1	11.0
Apr 2022	93.9	48.2	393.9	536.0	17.9
May 2022	82.9	58.7	443.1	584.8	18.9
Jun 2022	130.1	23.8	615.9	769.7	25.7
Total 2021-22	**1,488.0 ***	**541.7**	**4,955.3**	**6,685**	**18.3**

#Coxs River figure is the sum of MPPS gross extraction figures and WPS net extraction figures.
*Incidental 300 ML water use at SSCAD.

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Thompson Creek Reservoir

Emergency water Discharge

- High rainfall since June 2022 increased water level in TCR to its full supply level
- Major flooding was experienced in Central West District in November
- Pipers Flat Emergency Water Discharge valve is purpose build to reduce water level in TCR under Dam Safety Act
- EA submitted licence variation to EPA to support the temporary discharge of water for 30 day period
- Discharge commenced on Monday 14 November 2022
- Discharge was stopped on Monday 5 December 2022 when TCR reached the Low Supply Level

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Market Update

Operation in the Market

Operations (Site) Update

Operations update – December

Operations Update – Low Load

People

- Apprentice information afternoon was held
- Currently advertising for Mechanical Fitters and Maintenance Leader.
- Also advertising for Graduate Engineer Programs – Chemical/Process Controls, Operational Technology & Cyber Security, Mechanical Engineering, Electrical Engineering & Civil/Structural Engineering.
- Operator recruitment and training is ongoing
- Warehouse trainee, Environment Officer and Operational Technology Engineer appointments
- We currently also have an Electrical Engineering vacation student and a vacation student in the Chemical team

Lamberts North Ash Placement Project

Lamberts North Ash Placement Project

February to October 2022

- No complaints received
- No material environmental incidents reported
- Installation of leachate barrier system in area 1A(A) complete

	Brine Conditioned Ash (ton)	Water Conditioned Ash (ton)
Mt Piper Ash Repository (MPAR)	41,462	151,783
Lamberts North Ash Repository (LNAR)	78,633 (Stage 1)	146,408 (Stage 2)
LNAR to MPAR	0	128,609

Community Update

Community

- Round 2 Community Grants Awarded

Creative Community Concepts	Mental Fitness Workshops – Lithgow High
Dymocks Children's Charities	Library Regeneration – Portland Schools
LINC	Mums & Bubs Connection Group
Lithgow High School	Sustainable Future Project
Lithgow PCYC	Equipment Purchase
Thrive Services	Rock and Water Program

Community

A Certificate of Appreciation was received from St Joseph's School for supporting their school fete.

Photo left showing metal cutting band saw purchased by the Wallerawang Men's Shed with Grant funds from Round 1

Community

Supported Events:

- Lithgow District Business Awards – Black Rose Awards
- Symposium Lithgow Transition
- TSEP – Teacher Earth Science Education Programme
- Portland Christmas Tree Lighting event
- Rydal Show

Upcoming Events:

- School presentations

Community

Empower Me – ABCN

In August we participated in a mentoring session with students from Lithgow High. The session focused on equipping students with confidence and the mindset to cope with a rapidly changing world.

- *I learnt that it is okay to do whatever you are happy with*
- *I learnt more about self acceptance*
- *Matt taught me that it is important to live in the moment and to focus on one thing so I can get through what I'm dealing with and how to work my strengths*
- *I learnt how to be resilient using writing and reading – thanks Michael!*
- *I realised how important it is to do something physical*
- *I know more about building resilience and overcoming my adversities*
- *I learnt it is OK to let your feelings out & that men struggle with their feelings too.*
- *It is important to be mindful and to stay active and find hobbies when things get rough.*
- *Talking to others is great.*

Community

Black Rose Business Awards - Saturday 26 November

Attending on behalf of EnergyAustralia were Peter Griffiths, Donna Field and Jennifer Cordina.

EnergyAustralia were naming rights and major sponsor of the event.

Pete did the honors in speaking on behalf of EnergyAustralia and also presented the below major awards we sponsored

- Excellence in Micro Business Award
- Excellence in Small Business Award
- Excellence in Large Business Award

Community

TESEP - Teacher Earth Science Education Program

Rock Expo 2 - 4 November

Funded by EnergyAustralia, geoscience events were offered to Primary and Secondary schools in the Lithgow region. Participating schools were:

- Lithgow - Lithgow High School & Cooerwull Public School
- Portland - Portland Central School & St Joseph's Primary School
- Capertee - Capertee Public School

Across these five schools;

- 5 Professional Development workshops were run for a total of 24 teachers
- 5 classroom 'incursions' (geoscience lessons) were run for ~140 students and their class teachers

Figure 10. Capertee Area School students with a big 'thank you' for their EA-sponsored incursion (4 November).

TESEP Photos

Pumped Hydro Update

Project Update

- Geotechnical program commenced in September 2022 and drilling is underway
- Engineering design to commence early 2023 once geotechnical data is available
- Scoping for the Environmental Impact Assessment is underway with technical studies to commence early 2023
- Stakeholder engagement is ongoing with consultation on impacts, mitigations and opportunities for benefits sharing to be a strong focus throughout 2023

Geotechnical Investigation Program Update

- Access track works are complete and drilling is underway, around 50% complete
- Shoreline drilling taking place in January, EA has worked with the Recreational Centre to find an alternate access point to minimise impact on community
- Drilling to continue into the New Year with the program due to finish by April 2023

Project in Focus

Mt Piper Battery Energy Storage

Project Overview

A battery of up to 500 MW/2000 MW hours is being considered for development

Mt Piper BESS	
Location	Mt Piper PS, Lithgow, NSW
Proposed Capacity	Up to 500 MW/2000MWh
Preferred Technology	Up to 4 hour Li-Ion battery storage
Connection	Potential connection options: 330kV and 500kV connection options are under consideration
Planning Pathway	State Significant Development

Where is the proposed site?

The site is located to the South of the Mt Piper Power Station

What service do BESS developments provide

- Stores surplus energy generated during periods of low demand
- Stored energy is released back into the grid during periods of high energy demand or constrained supply
- Provides security of supply as the penetration of renewables increases
- Increasingly important to support reliable operation of a power grid with higher share of renewable energy

Site Advantages

- Access to existing substation without the need for transmission lines across private land
- Utilising unused land within existing EnergyAustralia landholding (previously used as laydown area)
- Existing site access
- Limited visual & amenity impact

Environmental considerations

- Preliminary assessments have been undertaken to inform scoping report
- Detailed assessments for EIS will include traffic, noise, hazards and risk (including bushfire), socio economic and heritage impacts (among others)
- To date, no evidence of significant environmental impacts
- Scoping report currently under review by DPE

Community Consultation

- To be key part of Project
- Initial stakeholder engagement has commenced
- Detailed consultation plan under development to support EIS process and public exhibition

Thank you