

Name	Mt Piper & Wallerawang power stations	Meeting Date	14 March 2018
Meeting / Subject	Community Reference Group	Recorded By	МВ
	Meeting 43	Total Pages	12

Members:	Julie Favell, Alex Preema, Jim Whitty, Helen Riley, Jamie Giokaris, Sue Graves		
EnergyAustralia	Malcolm Murphy Head of Mt Piper		
	Michelle Blackley Support Services Leader		
	Ben Eastwood	Environment Leader	
	Geoff Gay		
Apologies	Beverly Gilbert, Rob Cluff,		
Minute Taker	Michelle Blackley	Support Services Leader	

Meeting

Welcome to Country

Welcome to Country was conducted by Auntie Helen Riley.

Business Arising:

The Action Table was reviewed by the committee. The update is in the Action Table at the end of these notes.

The action item relating to the reeds around Lake Wallace was discussed. Mr Preema believes that the reeds support migratory birds and should not be removed.

Market Update

The electricity demand levels were displayed and explained by Mr Murphy. The recent mild weather has flattened the peak demand. The average demand has been stead for the last 12 to 18 months.

The Summer high demand period did not get as high as expected and was covered adequately by available generation across the market.

Operational Update

<u>Mt Piper</u>

Both units are currently in service and operating reliably. A minor outage is being organised for Unit 1 to be conducted during Spring of 2018.

Coal Plant projects are underway to improve the handability of the coal coming into the station.

Preliminary planning is underway for future outages to improve plant flexibility and efficiency. We recently conducted a successful test for 6 hours at 700 MW to ensure that we could generate at this level without plant issues emerging.

The upgrade of the Digital Control System (DCS) for the coal plant and water treatment plant is progressing.

Pine Dale Mine Update

The first incorporation of Pine Dale Mine information in new combined CCC format. The inclusion of Pine Dale Mine CCC has been incorporated to satisfy Project Approval conditions relating to community consultation.

Yarraboldy project update:



- In care and maintenance while future resource projects are being assessed.
- Progressing rehabilitation maintenance in previously mined areas.
- 1 Complaint received relating to the relocation of an excavator undertaking rehabilitation activities.

EL 7621: Future project under review, with the main focus on commercial viability. The review will be a desktop process with no anticipated community impacts expected from this preliminary assessment.

ACTION: Committee would like to see more information about Pine Dale Mine and some background as this was new information for some members.

Wallerawang Repurposing Project

As stated in previous meetings, EnergyAustralia are continuing to work with the 4 proponents for the repurposing projects. This process will take quite some time. The proposals cover manufacturing, transport and recycling activities. As we have expressed before, these projects are highly commercial in confidence and little can be advised at the moment. EnergyAustralia are providing their full support to the repurposing concept with dedicated staff working on it.

When any information can be provided to the public we will advise this Committee. There is a memorandum of understanding agreed with the major proponent and they are progressing with project feasibility but that is all we can say.

The committee again expressed that these projects be given as much support as possible to try to get further industry and employment in the Lithgow Area. Mr Murphy assured the Committee that EnergyAustralia are providing engineering information and working with Government stakeholders to progress repurposing. EnergyAustralia are investing heavily in Mt Piper with \$30M being planned for turbine projects alone and \$100M in the Water Treatment Project.

Wallerawang DDR

EA Auctions are stripping out equipment for packages 5 and 6. There are 10 packages. There will not be a lot of obvious change in the major building structures over the next year.

ACTION: Provide more information about the equipment in upcoming packages.

Asbestos assessments are ongoing and their inspections are carried out in advance of work teams entering work locations.

Aurecon is working on options for powering the site in a different manner from current arrangements. to allow for some site activities to continue. EnergyAustralia staff continue to conduct the environmental monitoring that is required under the site license. This requires some equipment to be powered.

Final rehabilitation options are under consideration for the Ash Dam areas - Kerosene Vale Ash Repository and Sawyers Swamp Creek Ash Dam. This centres around capping, drainage controls and water treatment. A discussion was conducted around recent comments from Lithgow City Council about the proposed capping material for the dams.

The Committee believed that the Council might need to be better engaged by EnergyAustralia about the capping project. Mr Murphy advised we have already discussed the issue with Council but we were also developing a communication plan for the future of all the projects we are working on in the region to improve the level of engagement with the community.

A review of buffer land around Wallerawang power station was being conducted at the moment to assess future uses and development opportunities.



Capping Project for Sawyers Swamp Creek Ash Dam (SSCAD)and Kerosene Vale Ash Repository (KVAR)

Ben Eastwood explained the locality and details of the two ash areas using an aerial photo. He advised that rehabilitation studies have been conducted over the last 12 months to develop stable drainage areas and eventually deregister the dam. It was found that there was a shortfall of suitable material for capping these areas. The capping project is described as:

- The importation of suitable capping material to progressively rehabilitate KVAR and SSCAD
- A maximum of 150 road registered truck and dog vehicles per day which is up to 300 truck movements would be required to transport the capping material.
- The project would utilise existing heavy vehicle access points at the private coal haul road entrance at Wallerawang Power Station and the private coal haul road.
- The haulage route from Sydney to Lithgow is via Bells Line of Road or Great Western Highway then Castlereagh Highway to KVAR and SSCAD
- Resource recovery exempt material is to be used including: Virgen Excavated Natural Material (VENM) and Excavated Natural Material (ENM) from construction projects in Sydney.
- The project will have a 12 to 18-month duration.

A development application has been submitted:

- With supporting Statement of Environmental Effects to Department of Planning & Environment (DPE) for the Modification of the KVAR Project Approval.
- DPE requested that the KVAR Project area be extended to include SSCAD
- Public exhibition period of two weeks, DPE to confirm dates, likely commencing late next week.
- Public Comment is open from Friday 16 March to Monday 9 April. An advertising will be in Friday 16 March Lithgow Mercury to invite submissions.

The Project Benefits are:

- Reduces the need for ongoing dust suppression systems including water sprinklers
- Supports the long-term closure & rehabilitation objectives of the sites
- Consistent with existing approvals and rehabilitation requirements
- · Opportunity to utilise back-loads from Sydney, reducing the need for additional on road trucks

A question was asked about the depth of capping material required. Mr Eastwood estimated approximately half a metre would be required. Ms Favell asked if the ash could be re-mined and expressed concern about any planted tree roots punching holes in the cap. Mr Eastwood advised that the ash could potentially be reused in the future and that any further processing in this area would need to go through a state development approval process and these issues would need to be addressed.

Closure and Rehabilitation

- A letter has been presented to DPE regarding EnergyAustralia's intention to modify the KVAR project approval for the closure and rehabilitation of the ash repositories.
- The purpose of this letter of intent was to secure the ability to modify the Project approval under section 75W of the EP&A Act which expired on 1 March 2018
- Aurecon has completed detailed studies to assist in the development of a Closure and Rehabilitation Plan. Assessments to date have included:



- · Groundwater model and surface water assessments
- Geotechnical assessments
- Asbestos options assessment
- Aboriginal cultural heritage assessment
- Detailed drainage design works
- Final landform design options

A closure and Rehabilitation management plan will be prepared for endorsement by statutory authorities. This will take 6 to 8 weeks to be documented and submitted.

A schematic representation of the proposed approval process was provided to the Committee. Refer below.



The committee asked whether NuRock could use this ash from KVAR and SSCAD. Mr Murphy advised that while both NuRock and EnergyAustralia had invested time and money into the plant it was still at trial stage and would require further funding to become a truly commercialised proposition. NuRock are currently looking to create more sales for their products and further develop the plant that can take up to 250,000 tonnes of ash per annum.

The committee wanted to understand the future of the Sawyers Swamp Creek Ash Dam with the capping and rehabilitation. They were advised that the dam would be de-registered in the future as part of the closure plan. The dam wall would be reshaped not to retain water.

Further clarification was requested regarding the route of the trucks carrying the ash. The committee was advised that the trucks would turn off the Castlereagh Highway at the Wallerawang Coal Plant entrance and enter the existing coal haul road to reach the ash repositories. EnergyAustralia has approval to use the coal haul road. If the ash repositories are to be capped the traffic is necessary.

Julie Favell requested a list of species of trees that would be planted on the rehabilitate land.

ACTION: Provide Committee with a list of plant species to be used in the rehabilitation of the ash repository areas.



Further questions were asked regarding the volume of water currently held in Kerosene Vale Ash Repository and why the water was of a turquoise colour in the picture? The volume is 850 megalitres. Wallerawang is licensed to treat and discharge this water under its existing licence. The chemical analysis of the water will be conducted and the water will be treated before it is discharged.

ACTION: Provide some information to the committee regarding the water in Kerosene Vale Ash Repository.

Jim Whitty asked about the future of Lidsdale Cut. Ben Eastwood advised that this area would be part of the closure and rehabilitation plan and maybe transformed into wetland with natural drainage after the dam itself was capped. The water naturally flow to this point and then onto Sawyers Swamp Creek and into the Coxs River. The quality of the water would be improved over time and by travelling through the wetland.

Asbestos Disposal Project

An application and supporting documentation was submitted to NSW DPE on 28 November 2017 for the new asbestos repository location. The application will be assessed by the Lithgow Council as a Designated Development and determined by the Joint Western Regional Planning Panel.

The Secretaries Environmental Assessment Requirements have been issued by the NSW Department of Planning & Environment (SEAR's).

Of particular note, is the requirement for a human health study and air quality assessment for this proposal. NSW Water's response also requires a comprehensive water assessment requirements.

Background and Justification

The Wallerawang DDR project will likely produce in the order of 7000 m³ asbestos containing material (ACM).

ACM material includes insulation, pipelines, building materials, industrial machinery and parts and auxiliary equipment

The current Environment Protection License 766 allows for disposal of onsite generated asbestos waste at approved asbestos burial site. There are two existing asbestos disposal sites on EnergyAustralia property. One site has been closed & rehabilitated and the current asbestos repository has an estimated remaining capacity of 1,200 m³.

A new disposal location for the ACM generated for the DDR project is required

Disposal Options Assessed

Eight alternative options were considered and three were considered at a high level and precluded as not being favourable

- Disposal within Pond D of SSCAD located adjacent to the dam wall
- New disposal site adjacent Wallerawang Power Station (WWPS)
- Disposal in the SSCAD/KVAR return water canal

The following five options were evaluated in further detail:

- Option 1: Disposal of ACM and insulation at a licenced facility offsite
- Option 2: Disposal at the existing asbestos repository
- Option 3: Extend the existing asbestos repository towards the west
- Option 4: Within the south-east corner of KVAR Stage 2B
- Option 5: Disturbed area of land located to the south of the return water canal



Option		Comment	Favourable
1	Offsite disposal	 most expensive option due to the cost of transport and licenced landfill costs 	Х
2	Use of existing asbestos repository	 limited remaining capacity suitable for small portion of estimated ACM volume Located close to Lidsdale community 	х
3	Extend the existing asbestos	 sufficient capacity close to residences significant community and council opposition likely 	х
4	SE corner of KVAR Stage 2B	 expensive earthworks large volumes of imported VENM required modification of existing Part3A approval likely 	х
5	south of the return water canal	 minimal social and ecological impacts low cost earthworks supports a trench-and-fill design suitable ground material for trenching easily accessible development application through Council 	~

Site Safety





The safety statistic show one lost time which as hurt shoulder for one of our staff working with the coal issues. The latest incidents have had low severity which is good but these incidents still require review to ensure that more serious injuries do not occur in the future. Overall these are good results.

Rail Unloader

Currently, there is a single source of coal supply to Mt Piper. This increases operational risk and presents a potential energy security issue. The project is required to guarantee Mt Piper's future and will allow blending of coal from different source to improve the fuel quality going into the power station.

To increase fuel supply options, EnergyAustralia plans to develop the Pipers Flat rail coal unloader project

As the Committee is aware project planning approval was received in 2009 and included a Rail loop and a Conveyor to Mt Piper. An engineering study and proposed modification to the planning approval are currently in progress.

EnergyAustralia proposes to reduce the environmental impact and improve operational efficiency of the project

The proposed modification will improve the design and includes:

- · realignment of the rail line to reduce earthworks and achieve a lower profile
- relocation of the rail dump hopper to remove an intermediate coal transfer station and conveyor
- the removal of permanent refuelling, wagon maintenance and train provisioning facilities
- the addition of a second connection to the main rail line and a spur line to provide operational flexibility
- an additional conveyor and rill tower near the power station

This is a long term project and could handle up to 4 million tonnes per annum to supplement the existing sources of coal. This is \$100M investment for EnergyAustralia. Springvale mine has an expected operational life to 2024 and Angus Place must go through development consents to reopen and modify current approvals for the mine.

The environmental impacts of the revised design are listed below:

Environmental factor	Potential Impact	Comments	
Noise and vibration	Reduced	Reduced imported fill and earthworks and rail line lowered	
Air quality	Reduced	Reduced truck movements during construction	
Biodiversity	No Change	Little or no change in the amount of native vegetation disturbance	
Aboriginal heritage	Amended	Aboriginal heritage due diligence will be required to assess the revised layout	
Surface water	No Change	The revised layout will have the same impact on surface water as the original proposal. Hydrology studies are part of the project	
Visual	Reduced	Lower rail line reduces visual impact	
Historic heritage	No Change	Revised design avoids historic heritage site	



Traffic and transport

Reduced

Significantly less truck movements to the site during construction

The Committee felt that as this was an existing approval, the proposed revision should be communicated to the local community and in particular, the households of Pipers Flat as soon as possible. Jamie Giokaris opined that there were a lot of new families in the area that were not involved in the previous public displays of 2009. He believed it should be clearly explained that a current approval was already in place and this new approval was for modifications to the original plan that would improve the amenity of the project. The case does not need to be proven again.

He further asked that it be noted that most of the households in Pipers Flat did not have mail boxes and used post office boxes instead both at Portland and Wallerawang post offices.

The community raised a lot of objection regarding noise and cutting off part of Portland from the service centre of the town with the level crossing at East Portland. Trains would be running on a line sometimes 20 to 30 metres from a home in the Portland to Pipers Flat segment of the line. The unloader itself was as close as 500 metres from neighbouring homes so anything to mitigate noise issues would be appreciated.

Sue Graves asked if a local householder could ask for their house to be sound proofed if necessary.

Jim Whitty was of the view that a lot of refurbishment work would be required for the Mudgee Rail Line to make the line active again for coal trains. Mr Geoff Gay explained that the trains to be used would not be the usual 30 tonne carriages but a lighter carriage up to 19 tonnes. This would mitigate the amount of load on the rail line and decrease the capital investment. Feasibility information regarding carriage loads, rail line upgrades, the timeline for the project and engagement with mine sources and the ARTC were all ongoing. It was put to the Committee that once the line was operational again that other users could have traffic on the line to get products to Sydney markets. This could be good for other industry in the Central West.

Water Management

- Oberon Dam level decreased to 68.63%. The dam level has decreased a further10 percentage points since the last meeting.
- Total Active Storage is at 89 with:
 - Lake Lyell at 89%
 - o Lake Wallace at 110.6%
 - Thompsons Creek Dam at 87.2%
- Lake Wallace continues to spill
- Amber Alert for Blue Green Algae at Lake Lyell, Lake Wallace and for Coxs River below Lake Wallace

Lamberts North

Ash Placement Volume

- September 2016 to August 2017 was 302,926 tonnes
- September 2017 to February 2018 was 154,300 tonnes

Ash Placement will continue through to August 2018.

- No complaints received,
- No incidents recorded,
- 2016-17 Annual Environment Management Report was submitted to NSW Dept of Planning and Environment on 30 November.
- The Report is available on our website.

The Biodiversity Offset Area Requirements completed since our last meeting:

• The area has been fenced,



- Tree planting has been completed with 2000 plants used in the area
- Further planting of the 5 Ha will be staged over several years

Joint EnergyAustralia NSW/Centennial Water Project

The final contract has been executed and awarded to Projectco with the Contractor presence increasing on site.

The project will be completed by June 2019 and the main earthworks are now completed. A major concrete pour is commencing tomorrow. Procurement of long lead time items has begun and final arrangements are underway to start pipeline construction.

The first newsletter has been sent out to residences with further newsletter planned to show progress with the project.

Dam Management at Mt Piper

Dams are managed in accordance with:

- Duty of Care to People, Property & the Environment
- NSW Dam Safety Act (1974 and 2015)
- Dam Safety Committee (DSC) Guidance Sheets for example DSC21 Community Consultation & Communication
- Australian National Committee On Large Dams (ANCOLD) Guidelines

All the local dams are regularly inspected and are all fully compliant.

Lake Lyell Dam

The dam is in good condition and was built in 1982 and upgraded in 1994 and again in 2002. The dam is made up of a concrete-faced rock fill with a 3.5 m raised reinforced soil crest. The dam has a catchment of 380 km2 and holds 33,500 ML at full supply level. Its height is 49.5 m and length 200 m.

Lake Lyell has a risk category of High C.

The Dam has a surveillance routine of three times a week and a Dam Specialist Safety Inspection and Report is conducted on an annual and a major inspection every five years.

EnergyAustralia is planning works to:

- Install a boat barrier in spillway inlet channel
- Repair Lyell Dam spillway minor concrete spalling.

The Committee asked that an article go into the Lithgow Mercury regarding the boat barrier to ensure the community were informed of the work and what is was for.

Thompsons Creek Dam

The dam is in good condition and was built in 1992. It is made up of zoned earth-cored random rock fill. Its catchment is 8.9 km2 and holds 28,000 ML at full supply level. The dam's height is 55 m and its length is 1910 m. This is the tallest and longest of our dams.

Thompsons Creek Da risk category is a High A.

The Dam has a surveillance routine five times per week and a Dam Specialist Safety Inspection and Report is conducted on an annual basis with a major inspection every five years.

EnergyAustralia is already inspected the submerged tower and replaced chain blocks, replaced riparian valves, the valve pit and fit extension handles. Upcoming works will reseed and vegetate bare patches of dam wall in Spring 2018. Alex Preema mentioned that the feral goat numbers were on the increase again and they should be culled before any planting is conducted.



Sawyers Swamp Creek Ash Dam

The dam is in good condition and was built in 1979. It is made up of clay core, zoned embankment, chimney drain and filter blanket. The dam has a catchment of 7.7 km2 and its remaining storage is 800ML. Its height is 40 m and its length is 900 m.

Thompsons Creek Dam has a risk category of High A and C.

The dam has a Surveillance routine five times per week and a Dam Specialist Safety Inspection and Report is conducted on an annual basis with a major inspection every five years. The Dam will be decommissioned but will continue to be maintained until this happens. Some maintenance work to reconstruct the fuse-plug and trigger sections and remediate the bypass channel is being planned. We will also remove debris and infrastructure in spillway.

Wallerawang Dam

The dam is in good condition and was built in1978. It is made up of a semi-gravity concrete spillway with earth fill spur embankments. The dam has a catchment of 200 km2 and holds 4,300 ML at full supply level. Its height is 14.4 m and its length is 620 m.

Wallerawang Dam has a risk category of Low.

The dam has a surveillance routine once per week and a Dam Specialist Safety Inspection and Report conducted on an annual basis with a major inspection every five years. The works planned for this dam are:

- Realignment of blowdown water drain to divert into Lake Wallace
- Replace Valves
- Replace concrete toe drain left spur embankment.

The Committee asked that an article be put into the Lithgow Mercury to advise the community of this works program.

Community Engagement

Community Grants Program 2018

Mrs Blackley advised the Committee that the first round of Community Grant applications are now open for community submissions. This round will distribute a further \$30,000 to local events and programs in the local area. We will provide information to the next Committee meeting for input into the funding distribution. Thanks again to the Committee for their assistance last year and in anticipation of their contribution this year.

Merging of Community Consultative Committees

The merging of the Mt Piper/Wallerawang Community Reference Group and the Pinedale Community Consultative Committee will begin with the next meeting. As the Committee is aware the new Chair is Mr Brendan Blakeley of Elton Consulting who has vast experience in the field. Brendan will be in direct contact with all the sitting members to inform you of the new process, the transition and the guidelines.

The new Committee membership is open now and has been advertised in the local media.

EnergyAustralia will send out information to the new members prior to the next meeting scheduled for June 2018. We also encourage all the current members to apply. EnergyAustralia thanks all the members past and present of the current committee who have provided advice and assistance for over 10 years to Wallerawang and Mt Piper power stations.

Energy Recovery Project

Romily Webster of RE Group and Julian Turecek, the Project Manager for EnergyAustralia attended the meeting to provide further information and answer questions regarding the Energy Recovery Project.



Mr Webster provided contextual information about RE Group and described the process of energy recovery and its proliferation across Europe and Britain. A sample of RDF was provided for the members to view.

The committee asked a lot of questions around:

- Emissions
- Road versus rail transport of RDF and traffic issues
- Health and visual amenity
- Home values decreasing because of the increase in industrial activity close to villages
- Dealing with Sydney's rubbish

Mr Webster was able to explain:

- Emissions were controlled through the tight specification of the RDF material and the EPA complex technical standard for the equipment and process of using this fuel. The best available techniques from the European experience would be used. These requirements were developed for suburban and urban locations and would be applied to this project no matter the proximity of the nearest neighbour.
- the traffic on local roads could be minimised by using the private haul road route and that any train transport would only get to a local rail head to be transported on local roads to get to Mt Piper,
- Health impacts were contained through contaminated material being removed from the sourcing
 process to create the RDF and scrubbing of any emissions to be treated further. He provided an
 example of the UK using the ash from their process to create besser bricks for the building
 industry.
- As the project footprint was located within the precincts of Mt Piper power station the home values issue would be mitigated,
- The RDF was a recycled resource that can be used rather than general rubbish

Mr Webster showed overhead photos of the sites in Europe and Britain and their proximity to residential areas. As this process is so mature in these countries the community provides its full waste stream to the sites for sorting, recycling and reuse including energy recovery. All these sites had a live data feed of emissions on a monitoring board outside the site.

Some members were not convinced and wanted to see the Lithgow and adjacent villages and hamlets provided with more natural areas, and a reduction on the impact on the local quality of life from all local industry. It was expressed that there had been several significant projects approved recently which could all negatively impact the local community and that the local community got very little out of the projects themselves.

Mr Murphy expressed the view that without local industry, employment and local business development would be difficult. He opined that a balance between the community and industry was essential to a prosperous region.

It was asked that further stakeholder consultation will be conducted to other community groups and interested parties. This was agreed as part of the normal project consultation process.

General Business

No general business as questions were asked throughout the presentation.

Meeting closed at 8.40 pm.

Next Meeting

The date for the next Forum meeting is to be advised.



Action List

Initiated	Action	Progress
June 2016	Merging of Pinedale Community Consultative Committee and Wallerawang/Mt Piper Community Reference Group to be implemented.	In Progress – June 2018 Meeting
February 2017	Investigate if the front grass at Wallerawang can be mown more often and potentially use the UnitingCare program	being considered once contract expired contact Jodie Stewart
February 2017	Investigate if the reeds in Lake Wallace can be removed.	In Progress
June 2017	Assess the feasibility of a Rugby League field being placed under the dry coal storage area	Not feasible - Complete
June 2017	EnergyAustralia to provide more information to media on the progress of the repurposing and DDR at Wallerawang	In Progress Provide list of media each meeting
August 2017	EnergyAustralia to review the available information from the hydrogeological surveys and advise if it could be shared.	In Progress
August 2017	 Contact to be made with Corporate regarding assistance with the solar panels for Hoskins Church and other local charitable and community organisations such as the Small Arms Factory Museum. Discussion relating to expanding local alternate energy pilot programs between EnergyAustralia and ARENA. Investigate the use of the Sports and Social Hall at Wallerawang as a Training Centre to develop local skills required to install alternate energy equipment. This could assist in the transaction of local workers of the coal mining and coal based power generation industries. Investigate the usilisation of low flow water turbines in EnergyAustralia normal operations Consider the use of Sports and Social Hall as a cultural centre including tourism 	 Complete Completed, Corporate contacts provided Included in Property Review In progress Complete New
December 2017	Request the water treatment project manager to come to a meeting and assist with a site tour	Included in June Meeting
December 2017	Presentation on the pumped hydro project	Included in June Meeting
March 2018	Further information to be provided on Pine Dale Mine, background and current activities	New
March 2018	Further information to be provided about the equipment being salvaged in each work package for DDR.	New
March 2018	Provide species list of plants to be used on ash repository rehabilitation	New
March 2018	Provide information regarding the quality of water in the Kerosene Vale Ash Repository	New