Meeting note

EnergyAustralia Lithgow CCC



Date 20 May 2019

Time 5:00pm - 7:00pm

Chair Brendan Blakeley

Attendees Jim Whitty, CCC member

Robert Cluff, CCC member Aunty Helen Riley, CCC member

Julie Favell, CCC member Lauren Stevens, CCC member Michelle Blackley, EnergyAustralia Greg McIntyre, EnergyAustralia, via

phone

Ben Eastwood, EnergyAustralia Mick Hanly, EnergyAustralia Steve Marshall, EnergyAustralia

Romily Webster, Regroup Rodney Ward, Regroup Recorder Jasmine Delnido

Apologies Clr Joe Smith, CCC member

Jamie Giokaris, CCC member Jill Cusack, CCC member

Item Discussion Point

1. Welcome and introductions

- » The meeting commenced at 5:04pm.
- » Brendan Blakeley (Chair) welcomed all participants, including an acknowledgment of country, and noted apologies.
- » The Chair ran through agenda.

2. Review of notes from previous meeting

- » Brendan called for comments on previous meeting notes. There were no additional comments.
- » Robert and Jim endorsed the previous meeting notes and they were accepted as the official record

Response to questions from previous meeting:

- » Q Where can CCC members access the newsletters that have been sent out to local residents in relation to the Water Treatment Plant?
- » A Brendan noted the letters that were sent out are not accessible on the web, but copies are available at the meeting for your information. Door knocking was also carried out to affected residents.

Julie asked what was the distribution area?

ACTION: Michelle to provide confirmation of this distribution area – the most recent newsletters were distributed to households in Skelly Rd Lidsdale due to the work occurring within the immediate area.

Julie asked if this newsletter will be available on the website so she can distribute it to her networks?



- Q Julie: Could the CCC be given more details on which areas in the Pine Dale Mine EA will relinquish?
- » Ben explained that the Rehabilitation and Completion Assessment for Pine Dale Mine and Enhance Place Mine was completed last year. EnergyAustralia is assessing the possibility of relinquishing parts of Pine Dale Mine that are privately owned, back to the property owners.

Over the past 5 years there has been a targeted approach in some areas in Pine Dale to try and improve the soil quality of those areas. There has been a lot of amelioration works done, like adding lime and mushroom compost. The areas that have been targeted for relinquishment are the places where coal has been exhausted. Ben indicated the areas where the works have been completed on a map, available on pp. 7-8 of the attached presentation.

Julie asked if the green outline on the map indicated private land that had gone back to the owner?

» Ben explained that the owner owns the land and that EnergyAustralia has a mining lease over that land and still has responsibility for rehabilitating the area before the lease is relinquished and the land returned to the owner.

Julie asked when the land would go back to the owner?

» Ben said that an application would need to be formally submitted to the Department of Resources and Energy to approve the relinquishment.

Julie asked whether the red map outline represents land leased by EnergyAustralia?

» Ben explained the red line represents the combined mining lease area. The orange outline shows areas under active rehabilitation.

Julie asked if all the land in the second slide map is EnergyAustralia's land?

- » Ben clarified that EnergyAustralia is leasing from the landowner and is looking into the possible relinquishment back to the land owner, based on completion of the agreed rehabilitation.
- » Brendan noted the CCC would be kept updated of the relinquishment process, and Ben agreed.
- » Q Julie: Could you please provide detailed information on the future plans for this EL? Including whether it is an open cut/underground mine, how far it will be from the closest neighbours and an expected time span?
- » This was addressed at the February meeting, and there is no change to response given at that meeting:
 - > Greg highlighted EnergyAustralia is not currently carrying out many activities under this Exploration Licence, however committed that the company would consult with people in the surrounding area and keep the community well informed if activities are carried out.
 - > The Exploration Licence enables the licence holder to do exploration deemed necessary, however at this point in time there are no immediate plans to undertake such work.

Julie stated that the community should be informed via a newsletter of the size and location of all mining leases. Will those areas be considered by EnergyAustralia to be open cut?

- » Ben noted that mining leases are included in the Annual Environmental Management Report.
- » Julie remarked that people do not understand and that there is a process where nothing is really said until after going through the Environmental Impact Statement (EIS) process and then it becomes clear but the community should be made aware of those licenses.
- » Brendan clarified that an exploration license allows for exploration activities only. If they decided to look at mining in a license area, it then triggers an EIS process. Any EIS process has to involve consultation with the CCC group prior to lodgement. The Secretary's Environmental Assessment Requirements (SEARs) will typically require consultation with the community prior to lodgement as well.
- » Q Julie: What was the process for notifying neighbours about the Rail Unloader Project.
- » Ben responded that neighbours were notified by way of letters, phone calls and door knocking.



Julie asked were there any community responses to this?

- » Ben noted there was only one submission to Council when this proposal was placed on exhibition.
- » Brendan noted that a link to the submissions report will be included in the minutes.
- » Q Julie: In relation to the LDP6 running on EnergyAustralia's land which had been discussed in the previous meeting. Although it is Centennial's discharge, the water is flowing onto EnergyAustralia land so as an organisation EnergyAustralia should be concerned about quality and the potential for human health risks. Could there be signs put up to say the water may be contaminated? Still waiting on the full analysis of the LDP6 discharge from EPA. Is there any change in EnergyAustralia's response?
- » Brendan noted that this question has been raised a number of times previously. He asked EnergyAustralia if there had been any change in response. Michelle stated there was no change to the previous response. EnergyAustralia would consider any outcomes or directives from the EPA as required.

Julie noted that once it is known what's in the discharge and if there is concern, EnergyAustralia must consider how they move forward to protect the community - even though it is EnergyAustralia's land.

- » Q Julie: Could EnergyAustralia provide a live link on their website for 24/7 monitoring so members of the public are able to view the emissions from Mt Piper at their discretion?
- » Ben noted that environmental data is published on a monthly basis to the web, as required under environmental protection licence 13007. The monthly reports are available to members of the public to view at their discretion. The monthly reports do show if monitoring is compliant or non-compliant. These reports can be viewed at: https://www.energyaustralia.com.au/about-us/energy-generation/mt-piper-power-station/mt-piper-epa-reports. EnergyAustralia does not have the facility to provide real time environmental monitoring data at Mt Piper to the web at this time. There is no intention to change current reporting arrangements as required under EPL 13007.
- » Ben said there are seven tests taken per second, on four monitoring points this means there are over 100,000 monitoring points gathering data per hour on that stack. The website shows the maximum and the minimum results over the month. Ben showed slides of data graphs, available on pp. 13 -14 of the attached presentation.

Julie asked if there are Australian standards for Sulphur Dioxide discharge?

- » Ben confirmed that there is no Australian standard or Australian limit for Sulphur Dioxide.
- » Steve explained the sulfur dioxide is related to the percentage of sulfur in the coal.

Jim asked if changing coal suppliers would affect the Sulphur Dioxide levels, or does the whole area have the same range?

» Steve said that sulphur levels vary by location though they are generally pretty consistent within a mining area.

Julie asked if the 24/7 monitoring is just for Nitrogen Oxides and Sulphur Dioxide or more?

- » Ben said there are more parameters monitored such as temperature and oxygen concentrations. Julie asked if EnergyAustralia could provide a list of what is monitored.
- » Brendan noted that EnergyAustralia had already supplied this list in the July 2018 and February 2019 meeting notes, and it is noted in the CCC question tracker.
- » Q Julie: What will the height of the stack for the Energy Recovery Project be?
- » Brendan asked Julie to hold this question over until the Energy Recovery Project presentation.
- » Q Julie: Would EA consider relinquishing Pine Dale Mine leases to the Government to be made into a wetland and heritage park?



» Greg noted that Pine Dale Mine will need to be rehabilitated and relinquished at some point. This option hasn't been considered previously. As with all our projects any plans we have will be made known to the CCC.

Julie asked if EnergyAustralia would mine first and then consider rehabilitation?

- » Greg noted again that EnergyAustralia has no current plans to recommence mining at Pine Dale at present or in the near future.
- » Brendan ended the response to questions part of the meeting. Brendan noted all questions will be added to the question tracker and any changes to the responses in the future will be brought back to the CCC group and be open for discussion.

3. Site update from EnergyAustralia

Site Safety:

- » Steve noted that the Days of Zero Harm figure of 106 on the slide has recently changed. There has been a recent injury to someone working in a remote location a worker tried to move a valve that had moved during transport and injured a ligament in their hand.
- » The Total Injury Free Rate (TIFR) is improved from previous years. TIFR is a ratio of the number of injuries divided by the man hours. It's been good for the year so far.
- » The Safety Performance graph is available on p. 16 of the attached presentation.

Water management:

- » Ben said water capacity is looking good Oberon Dam sitting at 40%.
- » Ben talked through slide, available on p. 19 of the attached presentation.
- » Ben noted that Lake Wallace is full and continuing to spill. There has been a Blue-Green Algae red alert which has led to Lake Wallace being closed by Lithgow City Council for recreational activities. Council should have a result this week and hopefully they can reopen next week.
- » Brendan advised that a letter was received from Peter Drinkall to the CCC group. Peter is opposed to the Department of Planning's decision not to return water to the Cox's River. It is primarily aimed at DPE and Brendan will table that with DPE.

Market Update:

- » Steve said Mt Piper's average demand is quite flat, with the increase in renewables and the unseasonably mild autumn. As the weather started to turn colder it was expected that demand would rise.
- » Steve talked the group through the rolling demand graph, available on p. 21 of the attached presentation. The green bar graph indicates Mt Piper's contribution to the market. Mt Piper's has been down in load, with one unit out of service for the last few months due to difficulties getting fuel.

Julie asked what is the overall capacity rate of Mt Piper's production?

» Steve said that is determined by the average generation in GWh for the month, divided by 1.4GW maximum capacity from Mount Piper, divided by number of hours (24 times number of days). It is the monthly average.

Operation (Site) Update – Mt Piper Operations:

- » Steve noted that MP1 is currently out of operation to preserve fuel. It will probably come back on at the end of the weekend, as it starts to get cooler.
- » MP2 had approximately 5 weeks of standby also due to fuel challenges. It has been in service for three weeks now and is running very well.
- » Stockpile levels are building up again as a result of reduced generation.

Julie asked whether Springvale and Centennial Coal are fulfilling their contract with Clarence, if they can't with Springvale?



» Steve could not comment on the contract per se but confirmed that Centennial are supplementing their low delivery periods with coal from Clarence.

Jim asked if the trucks go through Lithgow or via Mt Victoria?

» Steve confirmed they go via Mt Victoria.

Operation (Site) Update - Pinedale Mine Update:

» Ben said Pine Dale Mine remains in care and maintenance. As noted previously there are no immediate plans for any change so only maintenance works are being undertaken. Ongoing rehabilitation is occurring with a focus for 2019 on native rehabilitated areas.

Julie asked who the contractor is and commended their revegetation work.

- » Brendan suggested a presentation at a later CCC meeting about the rehabilitation process. The CCC group agreed.
- » Ben said a licence variation application has been submitted to the EPA to remove a depositional dust gauge from the licence. The gauge has been removed from a property in Blackmans Flat at the landowner's request – the landowner wants to sell. It has been decided that the dust gauge will be removed completely and won't be replaced – this has been worked through in consultation with the EPA.
- » ACTION: EnergyAustralia to provide a presentation on the rehabilitation process at the next meeting.

Julie asked how many dust monitors are in vicinity?

» Ben said there are approximately six depositional dust gauges around Pine Dale Mine and Blackmans Flat – there is still a monitoring network. The EPA is okay for the dust gauge not to be replaced.

Julie asked if the location of the other dust gauges could be brought to the next meeting?

» Ben confirmed those locations are available on the website in the <u>Annual Environmental</u> Management Plan Report.

4. Project updates from EnergyAustralia – existing and planned

Mount Piper Turbine Upgrade:

- » Mount Piper have received Board approval to proceed with the turbine upgrade, (previously advised).
- » Contract has now been awarded for works to be completed in 2020 & 2021.
- » Currently reviewing the network agreement with AEMO for system requirements and stability, works are progressing well.
- » Lower Cost per MW installed than wind equivalent daily generation to over 60 1.5MW wind turbines, or 140 times the size at Blayney.
- » Increases generation capacity to 730MW/unit (from 700) for no additional coal consumption.
- » Greg said the key point to this is an efficiency increase, to make it the most efficient power station on the East coast.

Thompsons Creek Foreshore Erosion Update:

- » Michelle said they have done work with local fisherman to find a good way to stabilise the area where people would like to fish. The project is almost complete, except for some backfilling in a small section and a site clean-up.
- » The erosion is under control a vast improvement for the site.

Wallerawang DDR - General Update:



- » Development application (DA) for an Asbestos Repository and a DA for Demolition and Rehabilitation have both been submitted to local Council. Some of these works are required to allow repurposing, but also give flexibility if rehabilitation is required prior to repurposing.
- » The site is currently being decontaminated of remnant acid from chemical processes.
- » Remaining inventory is being auctioned publicly.
- » Bettergrow is undertaking due diligence in relation to their proposal for repurposing the Wallerawang site.
- » Brendan said that when there is a firmer proposition, he encouraged Bettergrow to come and present to CCC group. Ben confirmed this.
- » Lauren confirmed that both DAs have been on exhibition with Council, and are now closed. Council is almost ready to give their recommendation about the Asbestos Repository to the Joint Planning Panel. This DA received one submission Council will follow up with this resident to see if she still has concerns or will withdraw submission. Council is still waiting on information from government authorities before they can assess the DA for Demolition and Rehabilitation.

Julie asked when Bettergrow would be able to come to the table and tell the group what is going on?

- » Greg said this would hopefully be in the August CCC meeting.
- » **ACTION:** Bettergrow to provide presentation about their proposal at August CCC meeting, unless process is further delayed.

Wallerawang DDR – Ash Dams Area Rehabilitation:

- » Ben confirmed the DA for an Asbestos Repository and for Demolition and Rehabilitation are being assessed by Lithgow City Council.
- » The Ash Repository Closure and Rehabilitation, SSCAD dewatering and capping Project are temporarily on hold until discussions with Bettergrow occur.

Julie stated that in previous meeting notes, it was mentioned that asbestos would be put into containers but on the bus tour they were told it would just be bagged and buried.

Jim confirmed that they had been told that asbestos would be bagged and put into containers.

Jim asked if asbestos would still be bagged and put into containers and put in trenches up the back - or will it just be bagged and buried?

- » Greg confirmed that asbestos would need to go into containers, as per Australian standards. EnergyAustralia will follow that up as needs to be clear.
- » **ACTION:** EnergyAustralia to provide clarity on asbestos disposal process.

Julie noted that at Kerosene Vale there is a lot of noxious weed.

» Ben said EnergyAustralia are in the process of creating a targeted weed spray program and management strategy for the 2019/20 season. This will include targeting the pampas grass weed at Kerosene Vale.

<u>Update Rail Unloader project:</u>

- » Steve said that EnergyAustralia received planning approval for the design modification of the Pipers Flat Rail Unloader project in January 2019.
- » The consent conditions are currently being worked through, including additional ecology and aboriginal heritage studies.
- » Work on the business case for the project is in progress.
- » While EnergyAustralia's preference is to continue to source coal locally, we are assessing other coal supply options.
- » EnergyAustralia is working with Transport for NSW in relation to the government's feasibility study to reinstate the Kandos-Gulgong line (expected to be finished late 2019 or early 2020).
- » The proposed modification includes:



- > realignment of the rail line to reduce earthworks and reduce the height of the embankment
- > relocation of the rail dump hopper to remove an intermediate coal transfer station and conveyor
- > 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
- > removal of train provisioning buildings.
- » Steve said they are still in the business case phase and there is not yet a date for commencement of works.

<u>Update – Lamberts North Ash Placement Project:</u>

- » Ben said the Ash Placement Volume in the first guarter of 2019 was 77,339 tonnes.
- » Due to the coal supply shortage, only one unit has been in operation resulting in no ash placement since February 2019.
- » No complaints received and no incidents recorded.
- » Operational Environmental Management Plan has been submitted to DPE for approval once approved, the CCC group will be provided the link.
- » **ACTION:** EnergyAustralia to provide link to Operational Environmental Management Plan for circulation to CCC members when approved by DPE.

<u>Update – Joint EANSW/Centennial Water Treatment Project:</u>

- » Work force changing from construction to commissioning.
- » 9km of pipe installed in the ground between Mt Piper Station and the Water Treatment Plant.
- » The transfer pipeline between the Centennial mine pump station and the Water Treatment Plant is completed, included flow testing.
- » The new Aerobelt conveyor (transfers ash and brine to ash repository) is installed and commissioned. Full load tests to be completed.
- » Commissioning of the RO pre-treatment filter plant planned for early June with the first water from the mine.
- » Control room and office building are being fitted out.

Julie asked if it is still on target to be commissioned by 1 July?

» Steve confirmed yes, the mine water discharge into the Cox's River would be stopped by that date.

Julie raised that she would like to see an environmental flow because she has concerns about what Lake Wallace will look like, and how it will impact the businesses that rely on this. Julie commented that no one can say what the flow was prior, how much loss of surface flow has occurred after 50-70 years of mining. There needs to be a plan in place for managing this. Julie has deep concerns and a lot of people will suffer if that flow is not there.

» Brendan clarified that DPE issued the approval for the discharge regime. The water in the Lake is controlled by WaterNSW. The flow regime is a DPE decision.

Julie agreed, but still noted that she would like to see local business support people who rely on the water.

Jim asked if there was any process you can do to resume supply?

» Ben said the Springvale Mine Water Treatment Plant isn't owned by EnergyAustralia and the water it treats doesn't come from EnergyAustralia related activities. However, it is certainly recognised that EnergyAustralia is a key stakeholder in the plant and recipient of treated water.



» The chair noted that these matters had been flagged a number of times in this CCC and they were more appropriately addressed within the Centennial CCC.

Community Engagement Program:

- » Michelle said the community engagement program for 2019 is similar to last year. There is \$60,000 for the whole year.
- » Round 1 has \$30,000 available. 8 applications were received by the deadline. This was advertised in the newspaper and on radio. Applications have been assessed with 5 meeting the selection criteria.
- » Round 2 has \$30,000 available and opens for applications from 1 August 30 August. Advertising will commence late July.
- » Michelle said if anyone knows someone who would like to apply for Round 2, let her know and she can supply application form. Michelle will also supply information for circulation to the group.
- » **ACTION:** Michelle to provide application form and advertisement for circulation to CCC members prior to the next meeting.
- » Round 1 Community Grant Successful Applicants:
 - > Lithgow Bears Rugby League Football Club Active Kids Sports Program
 - > Lithgow Public School Books in Homes program
 - > Wallerawang/Lidsdale Progress Association New Year's Eve Fireworks
 - > Lithgow District Car Club Security fencing for Motorsport Park
 - > Centacare Cooking Lessons for families in local community.
- » Michelle said they are also looking to develop another committee with EnergyAustralia, other local businesses and local Aboriginal community members to assist in being able to recognise Indigenous culture better in this community and get better cultural awareness to our staff. Also looking to celebrate Reconciliation week and NAIDOC week (brought forward from October due to weather) next week.

Community Engagement Program – Employment Opportunities:

- » Apprenticeship program In 2019 EnergyAustralia employed three local youth as first Year Apprentices – two Mechanical Fitters and one Electrical Fitter. These apprenticeships are for a four-year duration.
- » First Year Apprentices spend the first six months at Lithgow TAFE Skills Centre, four days per week and one day per fortnight at the Power Station. During the second six months they attend TAFE one day per week and work at the Power Station the remaining week days.
- » There are also 10 existing apprentices in various stages of their apprenticeships as either Mechanical Fitters, Electrical Fitters or Boilermakers.

Jim asked if apprentices get full employment at Mt Piper when they are finished?

- » Michelle said they are not quaranteed employment, but several have stayed on.
- » Greg said they recognise the need for more 'next generation' workers and will look to expand the apprentice program.

5. **Projects in focus**

Energy Recovery Project planning process

- » Greg introduced Romily and Rod from ReGroup, to present the Mt Piper Energy Recovery Project - a Waste to Energy facility.
- » Images and charts are available on pp. 49 62 of the attached presentation.
- » This proposal is to build a new boiler with a new filter and to take the steam from that boiler and plug that into the existing power station (unit 2) where that steam can then turn into electricity.



The aim is to make more power from Mt Piper without increasing the coal required, and provide a recycling component.

- » Currently developing EIS, which will come out in September/October. Currently undertaking community consultation to understand community concerns, before submitting EIS for review.
- » Operational date is aimed for end of 2022, depending on approval.
- » Romily said refuse derived fuel (RDF) is material that can't be recycled and goes into landfill it has an energy content we want to recover.
- » Mick said EnergyAustralia"s perspective is that it helps the long-term viability of Mt Piper and touches back on the customer and Government demands for clean energy.
- » Romily explained the circular economy cycle. In a circular economy, waste is a secondary resource with opportunities for recycled and recovered materials and energy embodied in waste to be returned to the general economy as part of a circular cycle of production, use and reuse. Energy Recovery is part of this circular economy, but only for the non-recyclable portions of the waste stream.
- » Energy recovery is not done much in Australia (either as electricity or as heat) but done a lot in Europe. Energy recovery is only introduced for materials that aren't recyclable.
- » Eastern Creek recycling plant in Western Sydney (which receives mixed waste) would be a key supply of RDF materials that they cannot recycle.
- » In project overview, there is also an area in Lamberts North to build a dedicated Ash Repository to take ash from this process.
- » Romily explained EIS studies are underway and will be released for community consultation these studies will be made available in a staged way to get community feedback upfront, before submitting EIS.
- » Romily said he has been unofficially told that the stack will be 70 metres high. That will be high enough above the existing boiler house to ensure a safe working environment in the boiler house.
- » Mick will organise more events for the community soon to learn about these studies and give feedback.
- » Romily explained the stages of the EIS process available on p. 56 of the attached presentation.
- » The project has partnered with Steinmüller Babcock they are the nominated technology provider and will provide the core boiler and the gas treatment technology.
- » There is a developed concept layout for the project, further transport and logistics modelling have been conducted and the stack height modelling is complete.
- » EPA and DPE have been provided with project updates.
- » There are upcoming community information session dates.
- » **ACTION:** Mick to advise upcoming community information session dates for circulation to CCC.
- » Romily explained how EfW works in Rűdersdorf, Germany. He showed a facility run by Steinmüller Babcock that has been in operation since 2009.
- » Romily said the Mt Piper Energy Recovery station would be 85-87 megawatts of thermal energy that would enter the existing steam cycle.
- » Romily gave a general explanation of the project's concept layout.
- » Mick said project information has been provided to local groups, including Lithgow Business Chamber and Lithgow City Council. Information will be presented to Lithgow Environment Group on 6 June. The intention is to have three smaller open community sessions in different areas to allow all people to attend. These will be advertised locally. Aim is to get community feedback to inform the design of the plant.
- » Mick gave an overview of the main feedback received so far. Having met with several groups and about 30 individual community members to date, all agree on two things:



- > That factual information needs to be distributed.
- > Engagement and allowing BOTH sides of the discussion to be heard is the key.
- » Positive comments received:
 - > See the project as a benefit to the existing power station. Additional avenues for power generation.
 - > Sustainable use of a currently unused potential resource.
 - > Additional jobs throughout construction and then ongoing full-time positions. Locals want jobs.
- » Negative comments received:
 - > Have environmental concerns particularly around air quality.
 - > Additional truck movements mean more potential road degradation and harm to commuters.
 - > Concerns it will only add to the issue of waste rather than to stop it in the first place.

Rob asked why the fuel supply is coming from Sydney and not the local area?

- » Romily explained that the processing facilities that produce RDF are located in Sydney due to economies of scale. Maybe in the long-term there will be demand for a processing facility in the local area. Additionally, Council appoints who processes their waste – perhaps next time Council goes to tender, the Mt Piper Energy Recovery can submit for a contract. However, unlikely something we can promise to do but exploring to the maximum extent if we can.
- » Romily said that Lithgow is part of a group of Council's called Net Waste and together they may provide demand for a local processing facility which could produce RDF. This is a long-term possibility.

Rob noted that if there was to be such a facility in the local area that it should provide a local benefit and take waste from Councils within the region.

Jim questioned the emissions from stack - What is it and what impact does it have on environment and air quality?

» Romily gave an explanation of how the various gases within the stack are burnt at very high temperatures, neutralised through additives such as lime and then run through charcoal filters before being bound and removed. He summarised by saying what goes out of the stack is very clean and this is addressed in the EIS.

Julie asked what are the emissions and will EPA regulations be equal to Europe's high standards? Will the EIS conduct accumulative assessment?

» Romily confirmed yes, the EPA requires the project meets NSW strict standards or European standards, whichever are higher. Yes, the EIS looks at accumulative assessment on air (i.e. - it will assess the existing conditions plus additional impact).

Julie asked how many jobs will be provided when operational?

» Romily said there will be 16 direct operational jobs on site, not including maintenance, trucks, transport etc.

Jim asked how the ash placement will be handled and how will fly ash be controlled?

» Romily said the team is looking into this and will prepare concepts in the EIS report. Lendlease will help advise on this to avoid it becoming airborne. This project will draw on Lendlease's experience, as the existing ash repository contractors.

Jim asked how much ash per tonne there would be after burning, compared to coal?

- » Romily said that the ash generally runs at around 12-15%.
- » Brendan noted that the group would like more detail of ash treatment.
- » ACTION: ReGroup to provide presentation about ash treatment for the EPA at August CCC meeting.



Julie noted Europe is shifting towards a circular economy and NSW has a policy to do the same- is this project economically viable when in 10yrs time we have less waste?

» Romily stated that in Sydney, 2 million tonnes of residential waste go to landfill. This Energy Recovery Facility will need 200,000 tonnes of 'right range' fuel. This right range is broad to ensure the facility can cope with changes to the waste stream in the next 10-20years. There will always be a place for waste to energy facilities for materials we cannot do anything else with.

Rob departed from the meeting at 6:50pm, apologising as he has another meeting.

6. **General discussion**

Jim asked how the generators would be transported from Wallerawang to the Asbestos Repository? They need to fit under the bridge on Castlereagh Highway and since the generators are bound with asbestos, they cannot be cut - What method will be used?

» This question was put on notice.

Julie asked if EnergyAustralia would consider providing clear and easily understood information about the emissions currently emitted and what would be emitted from RDF stack? What is coming out of stack for the power station and the energy recovery facility? Also, are there license requirements and if so, what's the cap? Julie asked that simple terms are used - people want to know more but need it simple.

» Romily explained how the air assessments are done and what is considered.

Julie asked what is actually being monitored – is everything that comes out of the stack listed in the previously provided list?

» Brendan advised this question will be taken on notice.

Julie stated that Lithgow Environmental Group is still opposed to the Energy Recovery Facility. Julie said the current campaign is to try and diversify the area to look at strengthening tourism for the area. The highway is a tourist highway and increasing truck movements was not consistent with tourism. Additionally, it's not a welcoming sight for visitors to see big holes in the ground, ash dams, etc. Tourism is an income we need to look at. Sydney should burn its own rubbish.

7. **Meeting close**

- » The next CCC meeting is scheduled for Monday 19 August 2019.
- » Meeting was closed at 7:00pm.

Energy*Australia* **Lithgow Region Community Consultative Committee**

Greg McIntyre Head of Mt Piper



Agenda

- 1. Welcome and Introductions
- 2. Review of Notes From Meeting Three
- 3. Site Update from EnergyAustralia
- Project updates from EnergyAustralia existing and planned
- 5. Projects in focus:
 - Energy Recovery Project Planning Process
- 6. General Discussion
- 7. Meeting close



Welcome and Introductions

Review of Notes from Previous Meeting

Response to Questions



Response to Questions

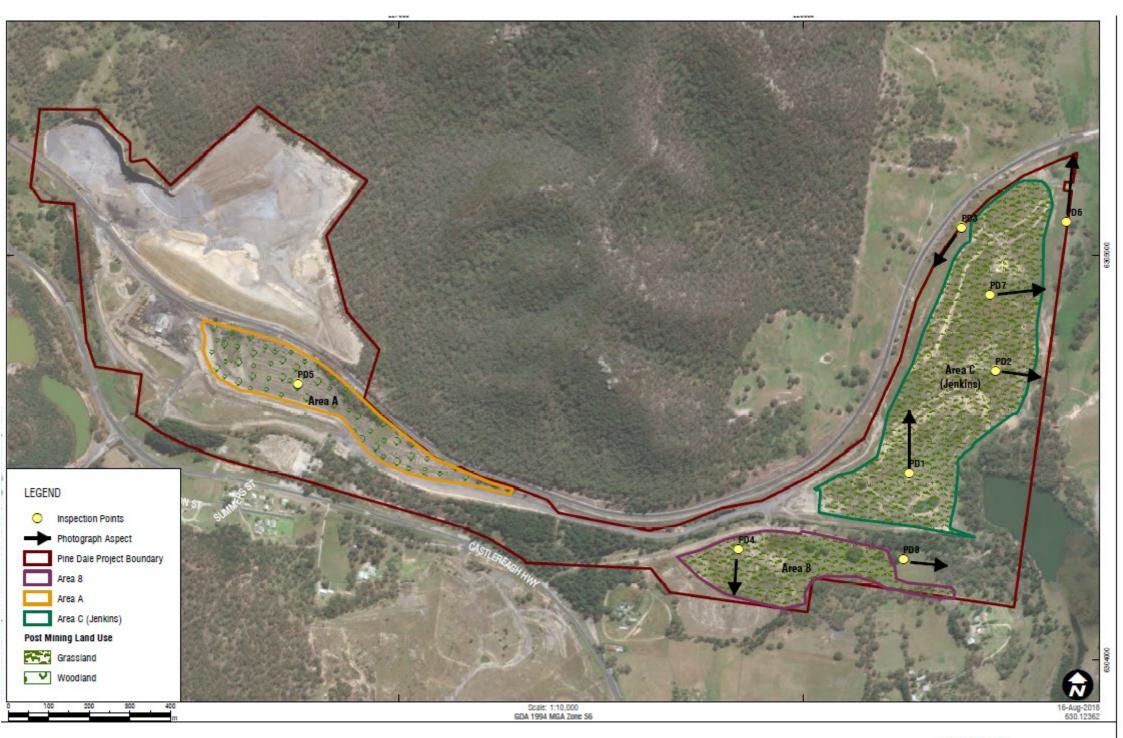
Where can CCC members access the newsletters that have been sent out to local residents in relation to the Water Treatment Plant?

• The letters that were sent out are not accessible on the web, but copies are available at the meeting for your information. Door knocking was also carried out of affected residents.

Could the CCC be given more details on which areas in the Pine Dale Mine EA will relinquish?

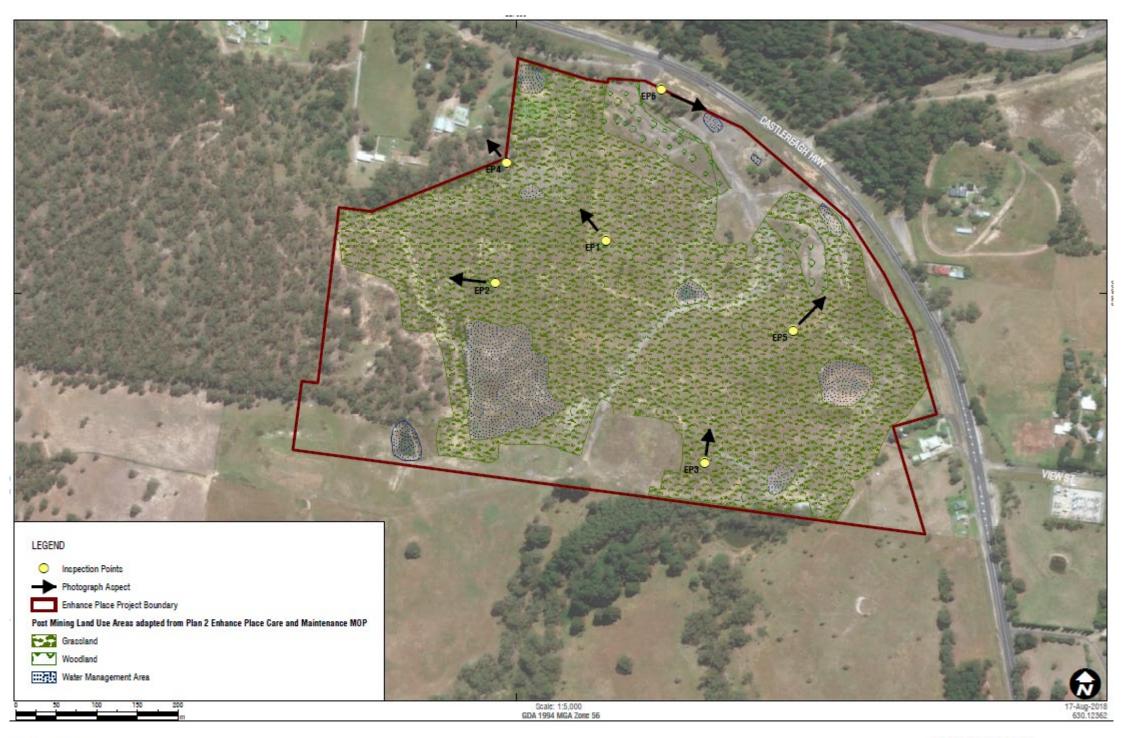
- EA has completed a Rehabilitation and Completion Assessment at Pine Dale Mine and Enhance Place Mine
- EA is assessing the possibility of relinquishing parts of Pine Dale Mine that is privately owned,
 back to the property owners







Pine Dale Inspection Points and Photo Locations





Enhance Place Inspection Points and Photo Locations

Could you please provide detailed information on the future plans for this EL? Including whether it is an open cut/underground mine, how far it will be from the closest neighbours and an expected time span?

- This was addressed at the February meeting, and there is no change to response given at that meeting:
 - Greg highlighted EnergyAustralia is not currently carrying out many activities under this Exploration Licence, however committed that the company would consult people in the surrounding area and keep the community well informed if activities are carried out.
 - The Exploration Licence enables the licence holder to do exploration deemed necessary, however at this point in time there are no immediate plans to undertake such work.



Process for notifying neighbours about the Rail Unloader Project.

Neighbours were notified by way of letters, phone calls and door knocking.

The LDP6 running on EnergyAustralia's land raised which had been discussed in the previous meeting. Although it is Centennial's discharge, the water is flowing onto EnergyAustralia land so as an organisation EnergyAustralia should be concerned about quality and the potential for human health risks. Could there be signs put up to say the water may be contaminated? Still waiting on the full analysis of the LDP6 discharge from EPA. Is there any change in EnergyAustralia's response?

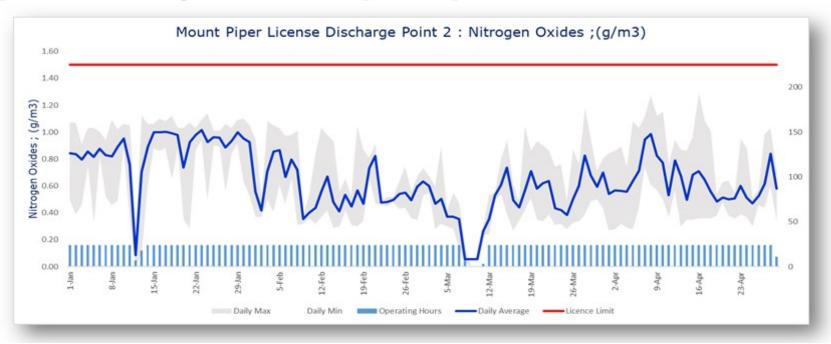
There is no change to previous response.

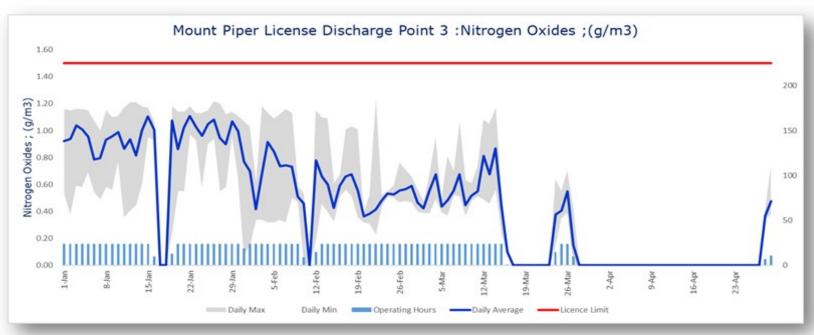


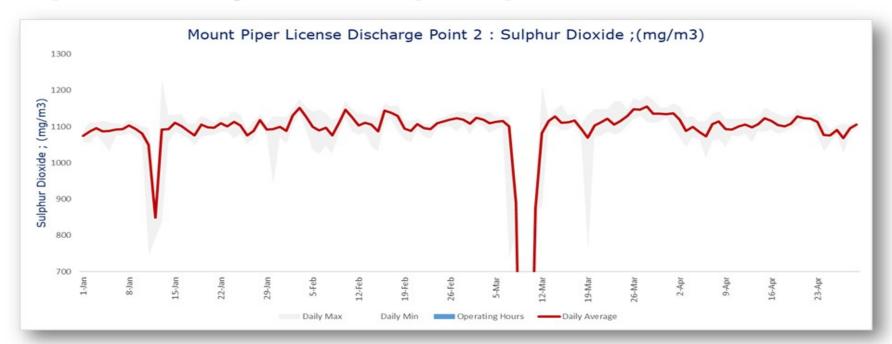
Could EA provide a live link on their website for 24/7 monitoring so members of the public are able to view the emissions from Mt Piper at their discretion?

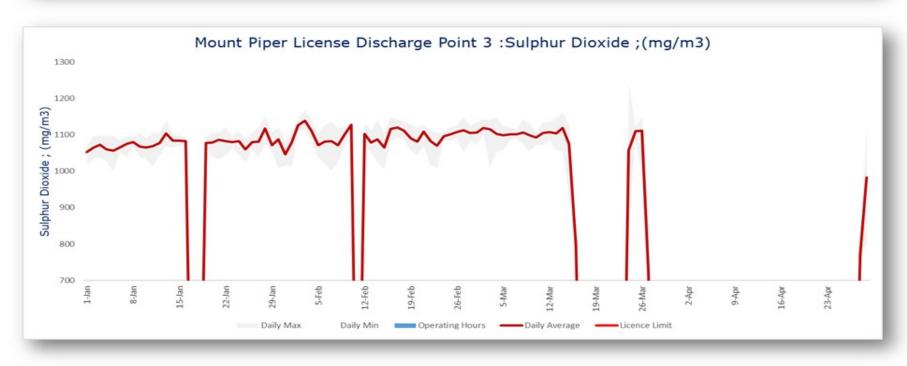
- Environmental data is published on a monthly basis to the web, as required under environmental protection licence 13007. The monthly reports are available to members of the public to view at their discretion. The monthly reports do show if monitoring is compliant or non-compliant. These reports can be viewed at: https://www.energyaustralia.com.au/about-us/energygeneration/mt-piper-power-station/mt-piper-epa-reports.
- EnergyAustralia does not have the facility to provide real time environmental monitoring data at Mt Piper to the web at this time. There is no intention to change current reporting arrangements as required under EPL 13007.











What will the height of the stack for the Energy Recovery Project be?

- We have commissioned ERM to provide advice on the required stack height based on both on-site safety requirements and the local environment.
- This advice should be received week ending 19 May and initial results can be discussed later in the meeting.

Would EA consider relinquishing Pine Dale mine leases to the Government to be made into a wetland and heritage park?

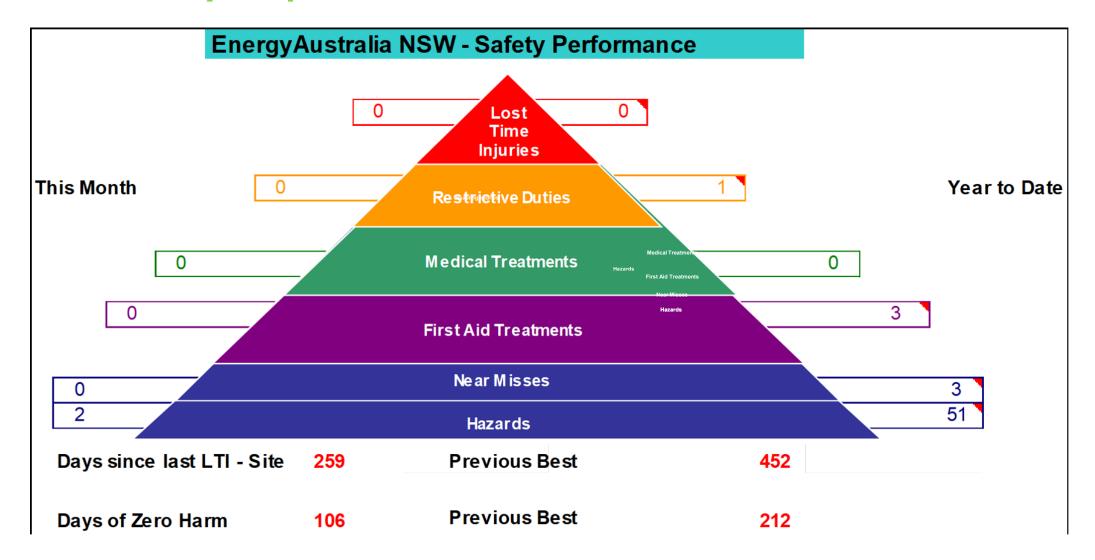
• This option hasn't been considered previously. However, EnergyAustralia will consider and any plans will be made known to the CCC and the broader community.



Site Safety



Site Safety - April 2019





Site Safety - April 2019

TIFR Performance 2019 - EANSW





Update - Water Management



Update on Water Management

- Oberon Dam level is at 40.1%
- Total Active Storage is at 89.1% with:
 - ▲ Lake Lyell at 94.6%
 - ◆ Lake Wallace at 110.6%
 - ◆ Thompsons Creek Dam at 81.0%
- Lake Wallace continues to spill
- Red alert for Blue-Green Algae in Lake Wallace. Amber alert for Bluegreen Algae for Cox River below Lake Wallace.

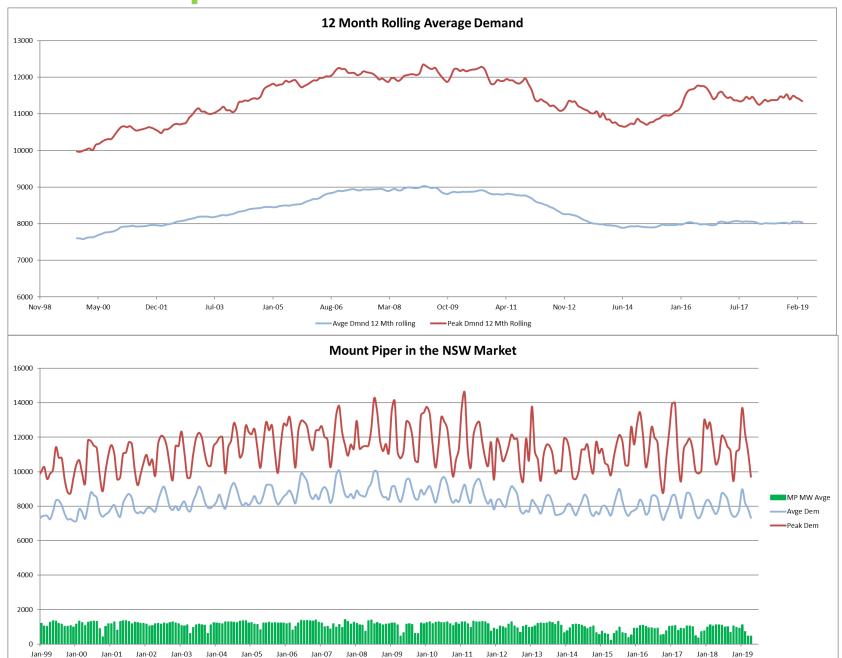




Market Update



Market Update





Operations (Site) Update



Mt Piper Operations

- MP1 is currently out of service on standby to preserve fuel.
- MP2 had approximately 5 weeks of standby (with MP1 running) for similar reasons. It has been in service for three weeks now and has been running reliably.
- Stockpile levels are recovering, but as a result of reduced generation, with lack of reliable supply from Springvale.





Pinedale Mine Update

- Remains in care and maintenance while future resource utilisation options are assessed
- Desktop feasibility work continuing
- Maintaining existing mining and exploration leases
- Maintaining rehabilitated areas with a focus for 2019 on native rehabilitated areas
- Update to the weather monitoring station in April 2019
- Licence variation application has been submitted to the EPA for to remove a depositional dust gauge from a property in Blackmans Flat at the landowners request and change the anniversary date







Mount Piper Turbine Upgrade



Mount Piper Turbine Upgrade - Current Status

- Mount Piper have received board approval to proceed with the turbine upgrade. (Previously advised)
- Contract has now been awarded for works to be completed in 2020 & 2021.
- Currently reviewing the network agreement with AEMO for system requirements and stability, works are progressing well
- Lower Cost per MW installed than wind equivalent daily generation to over 60 1.5MW wind turbines, or 140 of the size at Blayney.
- Increases generation capacity to 730MW/unit (from 700) for no additional coal consumption



Update – Thompsons Creek Foreshore Erosion



Thompsons Creek Dam Foreshore Erosion

Eastern Foreshore Erosion Protection

On site work commenced 28 January. Scheduled completion June

Progress

- Project substantially complete
- Small section of backfill and site clean-up outstanding



Thompsons Creek Dam Foreshore Erosion



General Update



- DA for am Asbestos Repository submitted to LCC
- DA for Demolition and Rehabilitation submitted to LCC
 - Some of these works are required to allow repurposing, but also give flexibility if rehabilitation is required prior to repurposing.
- Site is currently being decontaminated of remnant acid from chemical processes.
- Remaining inventory is being auctioned publicly
- Repurposing
 - Bettergrow is undertaking due diligence in relation to their proposed repurposing of the site (including logistics, recycling and 'growing media' facilities) and a term sheet is being negotiated



Ash Dams Area Rehabilitation



- DA for an Asbestos Repository being assessed by LCC
 - Council held a site visit on 30 April 2019 which was very positive
 - Application to be determined by the Joint Western Regional Planning Panel
- DA for Demolition and Rehabilitation submitted to LCC
 - Some of these works are required to allow repurposing, but also give flexibility if rehabilitation is required prior to repurposing.
- Ash Repository Closure and Rehabilitation, SSCAD dewatering and capping Project are temporarily on hold



Update Rail Unloader Project



Rail Unloader - Current Status

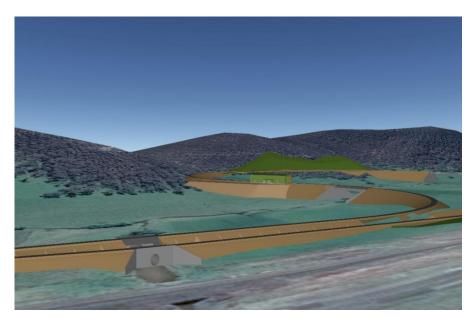
- EnergyAustralia received planning approval for the design modification of the Pipers Flat rail unloader project in January 2019
 - The consent conditions are currently being worked through, including additional ecology and aboriginal heritage studies
- Work on the business case for the project is in progress
- While EnergyAustralia's preference is to continue to source coal locally, we are assessing other coal supply options
- EnergyAustralia is working with Transport for NSW in relation to the government's feasibility study to reinstate the Kandos-Gulgong line (expected to be finished late 2019 or early 2020)

Recap: Modified Rail Unloader Design

Aerial view

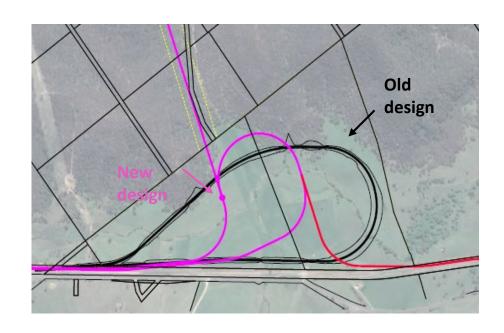


Pipers Flat Road view



The proposed modification includes:

- realignment of the rail line to reduce earthworks and reduce the height of the embankment
- relocation of the rail dump hopper to remove an intermediate coal transfer station and conveyor
- 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
- removal of trains provisioning buildings



Update – Lamberts North Ash Placement Project



Lamberts North Ash Placement Project Update

- Ash Placement Volume
 - 2019 quarter one volume is 77,339 tonnes
 - Due to the coal supply shortage, only one unit has been in operation resulting in no ash placement since February 2019.
- No complaints received
- No incidents recorded
- Operational Environmental Management Plan submitted to DPE for approval





Update – Water Treatment Project



Joint EANSW/Centennial Water Treatment Project



- Work force changing from construction to commissioning
- 9km of pipe installed in the ground between
 Mt Piper Station and the Water Treatment Plant
- The transfer pipeline between the Centennial mine pump station and the Water Treatment Plant completed, included flow testing.
- The new Aerobelt conveyor (transfers ash and brine to ash repository) installed and commissioned. Full load tests to be completed.
- Commissioning of the RO pre-treatment filter plant planned for early June with the first water from the mine.
- Control room and office building being fitted out.





Round 1

- \$30,000 available.
- 8 applications were received by deadline.
- Applications have been accessed with 5 meeting the selection criteria.

Round 2

- Open for Applications from 1 August 30 August
- Advertising will commence late July
- \$30,000 available



Round 1 Community Grant Successful Applicants

- Lithgow Bears Rugby League Football Club Active Kids Sports Program
- Lithgow Public School Books in Homes program
- Wallerawang/Lidsdale Progress Association New Year's Eve Fireworks
- Lithgow District Car Club Security fencing for Motorsport Park
- Centacare Cooking Lessons for families in local community



Sponsorship Recipients – January – May 2019

Ironfest



- Portland Art Show
- Anzac Day Ceremony Wallerawang (wreath)
- SeaBees Fishing Club Catch & Release Tournament at Lake Lyell
- St Josephs Portland Mothers Day Fete
- Lithgow Golf Club Mt Piper Plate Golf Tournament





Cultural Reference Group

- Members will be from EnergyAustralia and the community who represent & support Aboriginal & Torres Strait Islander people in the Lithgow LGA
- The group's aim is to:
 - Assist Mt Piper to better recognise Country and People
 - Deliver cultural awareness to staff at Mt Piper
 - Celebrate significant dates with the community, such as National Reconciliation Week & NAIDOC week.



Employment Opportunities

Apprentice Program

- In 2019 EnergyAustralia employed 3 local youth as 1st Year Apprentices – 2 Mechanical Fitters and 1 Electrical Fitter. These apprenticeships are for a 4 year duration.
- Our 1st Year Apprentices spend the first 6
 months at Lithgow TAFE Skills Centre, 4 days
 per week and 1 day per fortnight at the Power
 Station. During the second 6 months they
 attend TAFE one day per week and work at the
 Power Station the remaining week days.
- There are also 10 existing apprentices in various stages of their apprenticeships as either Mechanical Fitters, Electrical Fitters or Boilermakers.



L to R: Lachlan Gaylor – Apprentice Mechanical Fitter & Machinist; Griffin Houston – Apprentice Electrician; Jack Baxter – Apprentice Mechanical Fitter & Machinist



Employment Opportunities

New Employees

- In the period December 2018 to February 2019 Mt Piper has welcomed 6 new employees.
- All but one of these employees have come from interstate and settled in the local community with their families.
- The majority of these positions are in the Mechanical and Electrical Engineering fields.

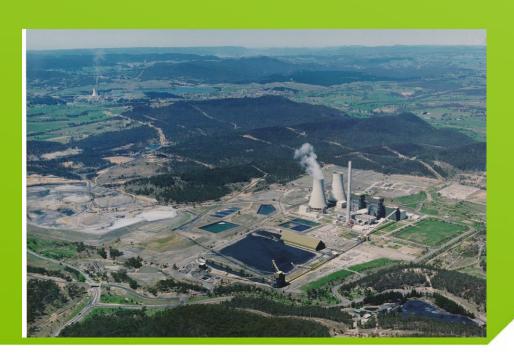


PROJECT IN FOCUS

Energy Recovery Project



Mt Piper Energy Recovery Project







Project summary

Proposed development

- Mt Piper would use refuse derived fuel (RDF) to improve the efficiency of the power station.
- RDF is a solid fuel commonly used in the EU and US to create energy. It is produced from <u>unrecyclable</u> waste, like plastics and linen.
- Mt Piper would <u>NOT</u> receive or 'incinerate' unprocessed mixed waste. Incineration has been illegal in NSW for 17 years.
- Mt Piper would receive RDF produced by NSW EPA licensed waste management facilities.
- A separate RDF boiler would be built on site. It would be integrated with and produce steam for the power station. It would use a modern combustion process and advanced emissions control system.

Benefits

- Helps the long-term viability of Mt Piper.
- Enables Mt Piper to reduce its carbon emissions by improving the efficiency of the coal fired process.
- · Unrecyclable waste would be diverted from landfill.
- About \$160M investment, \$3.7M pa for the area,
 300 construction jobs and 16 operational jobs.

Current status

- Feasibility assessment completed in 2017.
- EIS Requirements (SEARs) issued in 2017, updated in June 2018, with EIS to be completed mid-late 2019.
- Project could be operational by 2022.





Reasons for the project

Viability of Mt Piper

- The project is one of several EA is undertaking to support the long-term viability of Mt Piper.
- Consumers, governments and financiers are demanding cleaner energy production.

EA commitment to cleaner energy

- EA is on a managed transition to a clean energy future providing reliable and affordable power.
- Energy from waste (EfW) creates renewable energy certificates which help Australia meet its international carbon emission reduction obligations.

Improved coal efficiency

- Mt Piper uses 12,000 tonnes of coal per day. EfW enables EA to use this coal more efficiently to generate additional electricity.
- The integration of the EfW and coal could produce an additional 27 megawatts (MW) of electricity, enough to power about 50,000 average homes.

Improved waste recovery

- RDF is produced from <u>unrecyclable</u> waste that would otherwise end up in landfill. EfW is an efficient resource recovery option for this waste.
- EfW is not an economically efficient destination for recyclable and organic waste because this waste has established markets.





Circular Economy



- In a circular economy, waste is a secondary resource with opportunities for recycled and recovered materials and energy embodied in waste to be returned to the general economy as part of a virtuous cycle of production, use and reuse
- Energy Recovery is part of this circular economy, but only for the non-recyclable portions of the waste stream.





The RDF production process

NSW EPA licensed recycling facilities receive waste and separate recyclable, organic and unrecyclable material

(plastics, dirty paper, linen) using machine sorters. Recycling plant receives mixed waste Unrecyclable material separated Inert (heavy) and problem (PVC) materials removed











Unrecyclable material sent to landfill if no use



Recyclable/organic material recovered/reused







RDF customers with energy needs



RDF compacted or baled for covered transport







aurecon

Proposed development site







EIS and Planning Approval (Recap)

- To recap, the Secretary's Environmental Assessment Requirements (SEARs) were issued for the Project in 2017 and updated in mid 2018. The areas of study are:
 - Community & Stakeholder Engagement
 - Strategic and Statutory Context
 - Air Quality and Odour
 - Human Health Risk
 - Waste Management
 - Soils and Water

- Traffic and Transport
- Noise and Vibration
- Biosecurity
- Hazards and Risk
- Visual
- Greenhouse Gas and Energy Efficiency
- Flora and Fauna

- Aboriginal and non-Aboriginal Cultural Heritage
- Bushfire Risk
- Contributions
- Social and Economic

The EIS will be a public document and all stakeholders to the Project may review and provide feedback to the EIS when it is exhibited by the DPE.

BUT

As much as possible we want to hear and respond to the community's feedback before the EIS is submitted.





Stages of EIS

Gather Background Concept Design Initial Modelling Review & Discuss Results Amend Concept Design Submission Public Exhibition Decision

Explain concept and ask about concerns/need for further information

Discuss draft information and seek feedback on results

Discuss proposed changes in concept

Explain information presented in EIS







Project Update

Technical/Engineering

- Technology Partner selected Steinmüller Babcock Environment (SBE).
- Balance of plant and interfaces identified.
- Concept layout developed.
- Collated technical inputs to EIS.
- Further transport & logistics modelling.
- Stack height modelling completed.
- Commenced other modelling for EIS.

Regulatory

- Updates provided to Department of Planning,
 Environment Protection Authority.
- Met with EPA Air division to define air modelling requirements.
- Department of Water meeting to define water modelling requirements booked for end of May.

Community

- Established program of meetings with community groups (commenced in May).
- Planning public information days.
- Planning update to Council in June.





Steinmüller Babcock – a key reference

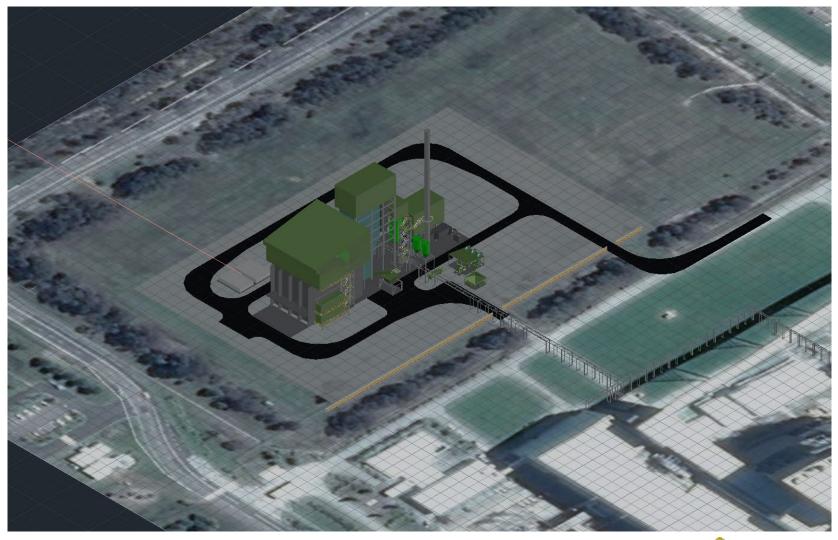








Concept Layout







Community Information

Lithgow Region Community Consultative Committee

- We have briefed the CCC (formerly CRG) regularly throughout the feasibility phase.
- The most recent community update was on Monday
 25th February. The next meeting is on 20th May.

Special Interest Groups

- Various local environment groups, progress
 associations, etc have been identified for individual
 information sessions or information sheets.
- The status of these is on the following slides.

Open Day

- An open day for Mt Piper was held on Sunday 15th
 April 2018, celebrating 25 years of operation.
- A Community Information Day was also held on Thursday 22nd Nov 2018 at the request of Council.
- Site Staff information session 7th & 8th May 2019.
- These opportunities were used to provide information and updates to the public on this and other Mt Piper projects.

More to come

 The consultation will expand as we proceed through this phase and gauge the community's level of interest and start to receive more feedback.





Community Engagement... What's Coming?

Lithgow Region Community Consultative Committee

Updates will be provided at each quarterly meeting.
 The May meeting with have this project as a focus area.

Special Interest Groups

- Engaging with local interest groups to lock in dates.
 i.e. Progress Associations, Lithgow Business
 Chamber, Lithgow Environmental Group, Local Men's
 Shed, Lithgow City Council & Mt Piper site staff.
- Other groups in the region are also now being engaged to seek their level of interest.

Information Sessions planned

Public session TBC - Tentative in June - Portland,
 Wallerawang and Lithgow.

More to come

- Local media has expressed an interest in doing some article on the ERP.
- ERP will continue to be discussed with many individual stakeholders as part of planned and unplanned face to face stakeholder engagement.
- Other special interest groups may be identified as we proceed through the EIS phase and will be engaged.





Community Feedback

Having met with several groups and about 30 individual community members to date.

All agree on two things:

That factual information needs to be distributed. Allowing people to have a balanced opinion.

Engagement and allowing BOTH sides of the discussion to be heard is the key

Positive comments received

- See the project as a benefit to the existing power station. Additional avenues for power generation.
- Sustainable use of a currently unused potential resource.
- · Additional jobs throughout construction and then ongoing full time positions. Locals want jobs.

Negative comments received

- Have environmental concerns particularly around air quality
- Additional truck movements means more potential road degradation and harm to commuters.
- Concerns it will only add to the issue of waste rather than to stop it in the first place.



