# **Meeting note**

# elten

## EnergyAustralia Lithgow CCC

Date 2 March 2020

Chair Brendan Blakeley, Elton Consulting

Attendees Jill Cusack, CCC member

Jamie Giokaris, CCC member Julie Favell, CCC member Alex Preema, CCC member

James (Jim) Whitty, CCC member Clr Joe Smith, Lithgow Council CCC

Representative

Lauren Stevens, Lithgow Council Michelle Blackley, EnergyAustralia Ben Eastwood, EnergyAustralia Greg McIntyre, EnergyAustralia **Time** 5:00pm - 7:00pm

Recorder Alexandra Krautil, Elton Consulting

Apologies Aunty Helen Riley, CCC member

Robert Cluff, CCC member

#### Item Discussion Point

#### 1. Welcome and introductions

- » The meeting commenced at 5:05pm.
- » Brendan welcomed all participants, including an acknowledgement of country.

## 2. Review of notes from previous meeting

- » Brendan called for comments on the previous notes.
- » There were no additional comments noted. The meeting notes were adopted.

#### Answers to questions/actions arising from December meeting:

- » Q Julie: Has the report on leaching into groundwater been finalised? Could the results be put into the community newsletter? What has been tested for and what are the locations of possible leaching testing should be completed on all elements including Chromium 6.
- » A: Greg highlighted the first phase of the independent groundwater study on the Ash Repository is expected to be finalised in March 2020, including a recommendation of the proposed mitigation control measures for receptors.
- EnergyAustralia have been working closely with consultants ERM, McMahon Services and the EPA, and are developing a concept design for mitigations. They are now close to finalising and EnergyAustralia will be able to provide a full update at the next CCC meeting without needing to speculate.

Julie noted she looks forward to receiving more information about the results. Want to ensure there will be no impact to local waterway and people.

- » The above answer was also provided as an update to the previous response noting an engineering company had been engaged to analyse water resources, and the question asking what information and results arose from the surface and groundwater assessments in early 2020.
- » ACTION: EnergyAustralia to provide update at the next CCC meeting covering the water studies and their findings.
- » Q Julie: Will EnergyAustralia be organising any renewable energy projects locally?



- A: Greg responded there are currently no wind or solar projects planned for the Mt Piper area. Locally, immediate project priorities are the Energy Recovery project, which is a more sustainable option than coal burning, and the Mt Piper Turbine Upgrade planned for later this year.
- » More broadly, EnergyAustralia supports clean energy projects with the rights to more than 800MW worth of renewable energy, solar and wind farm power purchase agreements, and half-own the Cathedral Rocks Wind Farm. EnergyAustralia also has \$3 billion worth of long-term renewable agreements.
- » In this way, EnergyAustralia does have renewable energy projects across the portfolio, rather than specifically in this area.

Julie replied the reason for this question was due to the great things happening across the portfolio — is disappointing to hear similar projects will not occur in the area. If the industry is transitioning from coal and gas, there should be another category for the community to improve their skills, and opportunities for training workers into the future. Noted the Energy Recovery project is not a renewable project as it is creating emissions.

- » Greg noted there are challenges associated with instigating renewable projects in this area due to geographic limitations – commercial sized solar is difficult due to the need for significant portions of land.
- » Additionally, need to consider where generation is required not necessarily NSW at this point in time, however this could change in the future. Currently other parts of the country have a necessity for more generation earlier, so the investment is in these locations.

Jim noted there can be problems getting baseload power from renewables – in this area may not be able to get 24-hour power from wind or solar.

Jill asked whether the government is still subsidising renewables?

» Greg noted EnergyAustralia are unable to answer. There is still some funding available through the Clean Energy Fund. EnergyAustralia did receive a small amount of funding from this for the Energy Recovery project.

Julie noted understanding that the area is not at the point of instigating renewables, however there should be some small, pilot practices as renewables will come eventually and the Lithgow community will need to be prepared.

» Greg responded the repurposing of Wallerawang may potentially give more opportunity for the industry to look towards renewables. Bettergrow have suggested they will be focusing on the area becoming a renewable energy hub.

A general discussion occurred surrounding climate change and the need for renewables.

- » Brendan brought this discussion back to the scope of the CCC, noting EnergyAustralia have provided their response to renewable generation.
- » Q Julie: Complaint raised regarding lack of support during recent bushfires as fire approached home coming for EnergyAustralia land.
- » Greg responded during the bushfire crisis EnergyAustralia instigated a comprehensive fire response plan, but the fires certainly tested the station and its resources, particularly for the first 24 48 hours before full organisation was mobilised to manage the situation.
- » After the State of Emergency was declared, station was in constant contact with emergency services, and had to take all direction from emergency services.
- » Several people did call the station asking for access to the haul road, Wallerawang or for assistance, however EnergyAustralia were not able to provide this access without potentially putting the person at more risk.



» EnergyAustralia broached access questions with the RFS and emergency services, who advised access should not be provided. EnergyAustralia were required to follow directions from emergency services and not provide access due to safety concerns.

Julie acknowledged this information but noted during the fires being so helpless while watching and waiting, the government could have provided more resources and support to the RFS to complete their work. Additionally, she highlighted there is a narrow strip of pines owned by EnergyAustralia bordering her street which could cause extreme risk to homes in future crises but is also habitat/food for native Yellow-tailed black cockatoos with the recent loss of habitat during the Gospers fire. Julie stated that she would like the pines to be thinned out close to homes, but not entirely removed — in this way they can still provide habitat for the Yellow-tailed black Cockatoo but reduce the fire risk to homes.

Other CCC members agreed the fires were extreme and impactful.

- » Greg noted the company is reviewing their bushfire management plan after it was tested by the crisis. Will consider the pine trees noted within this plan.
- » Brendan summarised the outcomes of this discussion for the group:
  - > EnergyAustralia are completing an ongoing review of their fire management plan, including the possibility of cleaning up/trimming the noted area, pending wildlife impact.
  - > **ACTION:** EnergyAustralia to update CCC with results of review at the next meeting.
  - > **ACTION:** EnergyAustralia to provide feedback to government bodies to consider the area's emergency plan for the next crises.

#### 3. Site update from EnergyAustralia

» Ben and Greg provided a general site update, covering a range of topics.

## Pinedale Mine update:

- » Ben indicated Pinedale Mine remains in care and maintenance with desktop feasibility work continuing no real change.
  - > Towards the end of 2019 EnergyAustralia fertilised the rehabilitation areas they survived the drought well and are looking particularly good after the recent heavy rainfall.
- The fires did come up to the highwall but did not impact any infrastructure or machinery and did not get into the exposed seam. The RFS used the open cut pits as fire breaks and were granted access to the site and haul road to respond to the fire threat.
- » Rehabilitation areas also did not burn, as they are generally dominated by wattles which generally survive such conditions well and are known to not burn well in a bush fire.

Julie asked if wattle is the dominant species of the full rehabilitation areas?

» Ben responded that wattle will be the dominant species in the early years of the rehabilitation, before diversity increases over the coming years through the succession of the native vegetation community.

#### Site Safety:

- » Greg highlighted the station has experienced a positive start to the year in relation to safety, which is a continuation of the good work from late last year.
- » There have been no lost time injuries, no medical injuries and overall no incidents of any concern in the safety space this year.
- » There have also been some good innovations seen EnergyAustralia is undertaking training in aero-reduction measures, which considers tools to limit errors at work based around human behaviour. The team have trained 120 people thus far, and once finished the station employees this training will also extend to regular contractors.



Julie asked whether safety training is a requirement for all contractors on site?

- » Michelle responded all contractors are inducted with a general safety training on safety systems. Safety systems must be cited by contractors before they win any contract with EnergyAustralia.
- » Greg added all contractors are required to have a safety plan and training before they enter site. They must abide by EnergyAustralia's safety management plan, unless their own goes over and above.
- » Refer to p. 14 of the attached presentation for detailed safety performance data.
- » Refer to p. 15 of the attached presentation for the Total Injury Frequency Rate graph
  - > Greg noted the 12-month rolling rate is continuing to trend downwards.
  - > There was a period in May last year where some incidents occurred as can be seen in the graph – no one was seriously hurt, but EnergyAustralia are still looking to drive down numbers continuously.

#### Update - Water Management:

- » Ben noted Oberon Dam is still fairly low, while the total active storage of EnergyAustralia's other three reservoirs has largely remained the same since the last meeting.
  - > The Oberon catchment area unfortunately did not receive as much of the heavy rainfall as other places.
- » Oberon Dam level is at 26.6%.
- » Total active storage is at 89.4% with:
  - > Lake Lyell at 86.2%.
  - > Lake Wallace at 104.1%.
  - > Thompsons Creek Dam at 91.9%.
- » Lake Wallace is spilling after the recent rainfall.
- » There is a red alert for blue-green algae in Lake Wallace, and an amber alert in Lake Lyell. Lake Wallace has been closed for recreational activities as a result.
  - > Ben noted EnergyAustralia can only surmise why this is, but it may be due to the increased flow of fresh water from the recent rainfall, following a prolonged dry period, putting greater levels of nutrients in the water during the warmer summer months. EnergyAustralia hope that the next high rainfall event will improve the water quality.

Alex commented the rain has been quite localised throughout the region.

Other CCC members agreed noting various impacts had been seen in different areas – in Wolgan Rd and Wallerawang area received six inches over January/February period. Agreed more rain is needed.

» Michelle agreed noting Oberon almost missed out, and much of the rain may have been absorbed into the ground due to the dryness.

#### Market Update:

- » Greg discussed the 12-month rolling average demand graph, alongside January figures.
- » The red line on the January figures graph indicates the peak in demand being seen yearby-year. This shows seasonal impacts, highlighting that demand across the network is being impacted by solar and wind.
  - > South Australia separated again today from the rest of the country effectively relying totally on wind and solar power.
- The green bars indicate that Mt Piper is starting to wind back on average generation as the demand is not there.



- > Peak prices in the morning and in afternoon price can go up significantly Mt Pipers role is to try to keep average price stable across a full day rather than take advantage of the peaks.
- » The 12-month rolling demand graph shows the average demand across NSW is trending downwards. This is a result of the introduction of more commercial and rooftop solar options throughout NSW, as well as interconnectors from OLD and VIC supplying into NSW.
  - > As these changes are primarily due to rooftop solar, it will be interesting to see what happens when battery technology improves and gains popularity. EnergyAustralia is preparing for this at Mt Piper.
- » Refer to p. 19 of the attached presentation for the rolling demand and January figures graphs.

#### Operations (Site) Update – Mt Piper Operations:

- » Greg noted there are currently no coal constraints impacting operations over 800 000 tonnes are available on the coal stockpile.
  - > The coal volumes have recovered with Springvale recommencing mining, as well as some Airly and Lidsdale deliveries.
  - > Springvale had a minor conveyer fire last week
  - > The coal quality being delivered has been problematic at times, so supplementing with Airly coal where required.
- » Planning is in progress for the MP1 Major Outage, scheduled for 70 days from October.
  - > The outage will include the turbine upgrade, along with a significant amount of other works targeted at life and reliability.
  - > EnergyAustralia have been approved to complete an additional program of works on MP2 to improve reliability before the major outage on Unit 1 occurs.
  - > Both units are suffering from some faults in boiler tubes there is a rectification plan in progress.

Julie asked whether such cracking has been seen before?

- » Greg responded the boiler tube cracking is typical of the units. It presents at the 25-year mark of life.
- » Greg noted he had seen the same in Tarong and Port Augusta it is an expected failure and modelling has been completed, so EnergyAustralia understand what is wrong and how to fix it.

Julie asked to clarify whether Springvale is back on board to all requirements, or is Airly providing most of the coal at the moment?

- » Greg reiterated Springvale is supplying the most coal at the moment, Airly is only supplementing when need be as there remain some difficulties with mining at Springvale.
- » Greg discussed the availability YTD vs Projected 2019 graph refer to p. 22 of the attached presentation.
  - > Availability was not strong in 2019 and trended downwards, particularly due to coal constraints and the six forced outages in the last three months.
  - > Mt Piper hope to have an uplift in availability in next few months will have capability in the area for a long time and need Springvale to support this.

Julie asked whether EnergyAustralia will also be accessing Angus Place after it goes through the DA system?



» Greg responded EnergyAustralia is unable to answer at this time. The Angus Place proposal is still being supported by EnergyAustralia as a future source of coal for the station.

Jim commented the conveyer from Angus Place is largely underground so nothing would change on the surface.

## 4. **Project updates from EnergyAustralia – existing and planned**

## <u>Lamberts North Ash Placement Project:</u>

- » Ben explained in January and February 2020, 2000 tonnes of ash has been placed on Lamberts North water conditioned ash area.
- » There have been no complaints received or incidents recorded since the last meeting.
- » The Mt Piper Brine in Ash Water Management Plan was recently reviewed by EnergyAustralia for the repository prior to submission to the statutory authorities for consultation and approval by the NSW Department of Planning, Infrastructure and Environment.

Jim asked why the Water Management Plan was being reviewed? Is there a problem?

» Ben noted the review is an administrative process that is required generally every three years for a management plan. The plan is expected to be kept up to date to include new project features and additional infrastructure such as sediment ponds constructed, the amount of ash to be managed etc.

Jim asked once the plans are reviewed, are they lodged with authorities?

- » Ben confirmed EnergyAustralia consults with the EPA, Council and WaterNSW with the draft plan, then it is sent for final approval to DPIE.
- » The plan will be required to be updated pending the outcomes of the independent water study to include any additional proposed mitigation controls.

Julie asked if there was a discrepancy found when the independent water assessment results are received, would there be another review of plan?

» Ben confirmed the plan would be updated – it is a live document and can be changed at any time to incorporate additional approved control measures that provide for an improved environmental outcome.

#### Water Treatment Project:

- » Greg highlighted that commissioning of the plant is complete, but testing is still being carried out.
  - > The R.O. Plant, OPUS and Brine Crystalliser plants have all passed their acceptance testing.
- » There will shortly be another test run to test the maximum capacity for 24 hours full load test requires the plant to run at 42Ml/day for a minimum of 24 hours.
- » Final optimisation and trimming of plant is ongoing minor outstanding items are being addressed.
- » EnergyAustralia have established an operational interface with the operating staff of the water plant and will start working closely together to ensure EnergyAustralia get the best result from the investment.

Julie asked what are the minor outstanding items that still need addressing and whether the brine crystalliser component is working well?

» Greg responded they are the general items you would find on a construction punch list – anything that has been picked up as a potential defect or looks not quite right.



» In relation to the brine crystalliser, there are still final tests being completed to optimise the function.

#### Community Engagement Program:

- » Michelle noted the Program will run once again in 2020 and encouraged members to advise anyone interested to apply.
- » Round One of the 2020 Program will be open for applications from 9 March 3 April.
  - > \$30,000 will be available.
  - > The round will be advertised in the Lithgow Mercury and Village Voice this week.
  - > EnergyAustralia have added Bushfire Recovery projects and programs to the application criteria for this round.
- » **ACTION:** Alex to circulate a copy of the advertisement, application form and guidelines to members alongside these meeting minutes to send to their networks.
- » **ACTION:** Michelle to update CCC with grant application results at the next meeting.

Julie asked for an example of a bushfire recovery project.

- » Michelle responded examples could include rebuilding of a community structure lost in the fires, a program on how to get bushfire ready etc. EnergyAustralia are open to anything to do with bushfire recovery as long as it is within the LGA.
- » Michelle highlighted EnergyAustralia's bushfire response since December 2019.
  - > The Workplace Giving program open across EnergyAustralia for staff donations has raised \$37,000 thus far. The final amount will be matched by both EnergyAustralia and CLP, and it remains open for donations until the end of March.
  - > Additionally, EnergyAustralia donated \$125 000 across affected communities where the company's sites are located throughout NSW, VIC and SA.
  - > \$50 000 of this amount was given to the Lithgow Lions Club to distribute locally for bushfire recovery.
  - > **ACTION:** Michelle to provide report back to CCC on how money was dispersed.
  - > During the crisis, when it became apparent the RFS was lacking consumable items on the front line such as water, electrolyte drinks, sunscreen etc, EnergyAustralia asked the supplier to provide EnergyAustralia with a price and they offered to assist when they found out we were donating the items to the RFS. As well as the pictured items pallets of bottled water were also supplied.
  - > Local RFS used the Energy Expo as a respite centre to recover while firefighting.
  - > Shift personnel and the RFS worked together to stop fire on the station's boundaries.
  - > Local RFS used water from Mt Piper to assist with the fire fighting in affected areas around the station.
  - 833 megalitres of water was released from Lake Lyell to assist firefighting efforts downstream in the Grose Valley. The water was released over a one-week timespan 57 megalitres/day. EnergyAustralia did not stop the release until asked to by the RFS. This did reduce levels in Lake Lyell for a time, but the recent rainfall topped it back up.
  - > EnergyAustralia liaised with local combat agencies to ensure critical staff were safe to come on site to continue to generate electricity for the NEM. There were only about 40 people on site during the worst of the fires others stayed home, and if they were having issues at home with the fires were not expected to come to work.
  - > Staff drove themselves to Portland Foodworks carpark to meet together to come as one unit under escort to start their shift at the power station to ensure their safety when approaching the fire zone.



Julie asked whether the skeleton staff level left the site vulnerable? Due to the unpredictability of the bush fires, was there a plan to manage should there be a problem? Additionally, was the exposed coal at risk of burning and increasing the fires? The stockpile is a concern to neighbours due to the coal and dust. How would the immediate community be notified if there was a risk to the station — would neighbours on both sides of the hill hear emergency alarms?

- » Greg responded because of the layout and type of site at Mt Piper, there was no point where there was any consideration by emergency services that the site was at risk.
- » Michelle noted there was discussion of protection zones in the previous CCC Meeting. The station worked since this time to keep the fuel load down, however overall due to the construction of Mt Piper with masses of concrete, the assets are very unlikely to be impacted by fire.
- » The worst impacts for the site would have been the loss of the coal conveyer from Springvale or the transmission line going down which sends electricity out to the market.
- » The access for staff as noted previously was the main vulnerability faced.
- » Greg highlighted black coal needs an extreme level of heat to burn. Did have dozers out on stockpile during the fires to watch for hot spots cover with coal to stop burning.
- » The stockpile is more likely at risk during warm, humid weather with rain and spontaneous combustion, rather than from bush fires.
- » Greg confirmed the risks had been carefully explored, and there are fire protection systems around the plant.
- » Michelle indicated the station would contact immediate neighbours directly as they would not necessarily hear the alarms.
- » **ACTION:** EnergyAustralia to provide update to CCC about any changes to approach, fire management plans once the internal review of the experience is completed.
- » Michelle discussed employment opportunities at the station.
  - > Three new apprentices have been recruited for 2020 through the Apprentice Program, two mechanical and one electrical.
  - > Additionally, onboarding another mechanical apprentice and two engineering trainees.
  - > Since the last meeting there has been one new starter in the operations team at Mt Piper, and onboarding two further positions in fuel coordination and engineering team leader roles.
  - > Currently advertising externally for two roles in the safety and engineering fields.
  - > Continue to host three vacation students to further their studies with practical industry experience one had their time at the station extended to gain further exposure.

#### 5. **Projects in focus:**

#### **Coal Unloader/Coal Security**

- » Greg noted it has been discussed before in this group that a DA has been approved to build a rail unloader at Piper's Flat. As a business, EnergyAustralia is looking at what this means broadly. It was determined in late 2019 that the company can build an unloader, but it will also need an operable railway, a railway line maintainer, employees to run and drive the trains and coal suppliers.
- » The project team have developed the Coal Security Project to manage these needs. This will include the rail unloader and additional studies required to support its development.
  - > The team is now well into studies required to achieve a business decision on whether to make the investment by September 2020.



- > 25 November 2019, a project framing workshop was held with internal stakeholders and project leads, internal subject matter experts, Current and future markets and EnergyAustralia's recently appointed major projects team.
- > This workshop was to bring parallel activities into a single coordinated project and to define roles and timeframes under the leadership of the Head of Mt Piper.
- » The Mt Piper Coal and Rail Framing Process identified that:
  - > action is required now to secure fuel for Mt Piper post Springvale's operations
  - > the answer to Mt Piper's energy security is multi-faceted, but not necessarily technically complicated
  - > Mt Piper has a key role in the transition to a clean energy future it will still be needed in dark, still times, in intraday periods, to respond to seasonable variability of large-scale renewables and to provide at lower cost to customer than running a gas fuelled peaking plant for extended periods.

Jim asked would the disused line from Kandos be upgraded and if so, who would be responsible for this?

- » Greg responded the project team considered whether to upgrade the Kandos line. Looking at the options of what is easiest to complete now to achieve requirements for the business, it is easier to bring down the existing line and build the unloader at Piper's Flat.
  - > Although this is a longer way around through Dubbo, it means EnergyAustralia do not have to re-facilitate a rail line.
  - > The team are currently determining whether to complete the required upgrades privately or in partnership with another entity. Transport for NSW (TfNSW) supported the use of this rail line.

Julie asked whether TfNSW could still make money from other users if the line was operated privately?

- » Greg responded that that would be unlikely if the line was operated privately by EnergyAustralia its sole purpose would be coal transport.
  - > Greg noted the operation plan has not been decided the team are still building up work into a package to determine a decision and will take this to the Board and owners in September.

Julie asked what the timeframes for the project completion would be?

» Greg responded the team is looking to have the unloader available for use by the end of 2023, and definitely no later than 2024.

Joe asked will the coal received through the unloader be above the Springvale contract.

- » Greg confirmed Springvale would not be affected by the rail unloader. EnergyAustralia will continue to support local supply in the first instance and depends on cost.
- » Angus Place remains a question mark.
- » Either way, Springvale will run out of coal in 2024, and Mt Piper do not want to be stranded, so a plan needs to be worked out now.
- » The issue is currently the highest priority of the business it is a key imperative of EnergyAustralia to secure coal supply for Mt Piper across the business.
- » Refer to p. 36 of the attached presentation for an overview of the coal unloader proposal.

## **Energy Expo Upgrade**

- » Greg highlighted the Energy Expo is in the process of being upgraded. Key upgrades include:
  - > touchscreens to allow access to various content



- > a virtual tour of the power station
- > an overview of the history of Wallerawang
- > a look into the future of power generation and renewables
- » The bulk of the works are now complete, and it is currently open for use. The works are expected to be finalised in April.
- $\rightarrow$  Refer to p. 37 39 of the attached presentation for some images of the upgrade.

#### Mt Piper Outage - MP1

- » Currently planning for a major outage on MP1 one of the biggest in the history of the station.
- » EnergyAustralia will be upgrading the turbine to give 30 MW more capacity for the same coal usage as now, as well as an additional \$46 million worth of other work.
- » This will likely be the last major outage in the life of this station and will prepare the station for at least another 20 years of service.
- » MP2 will be operating during the outage.
- » Works are expected to take approximately 10 weeks the team is currently planning how to mobilise, logistics etc. There will be a large increase of contractors on site to complete the work, lots of movements and people needing to sleep and eat.

Jim asked how many people are expected in the temporary workforce?

- » Greg responded they are currently expecting to need about 450 people above the normal workforce. This amount may wax and wane throughout the works, but overall that is the expectation.
- » The works will include:
  - > turbine upgrade works
  - > boiler maintenance with 25 years of service, cycling up and down for the market changes for a few years now has been tough on the boilers. This results in stress issues as they heat and cool, resulting in metal fatigue and potential failures.
  - > cooling tower inspections need to ensure the integrity of cooling towers and look at necessary repairs in the concrete
  - > transformer maintenance there are many areas where items are at middle age and degrade as they get older. Want to avoid transformer failures, so reducing risk through maintenance
  - > motor replacements replacement of major electric motors for dams and pumps
  - > air heater maintenance primarily all upgrades during the outage are around improving efficiency of the station. Once the turbine upgrade is complete Mt Piper will be the most efficient turbine powered coal station in Australia. Will use exhaust gases from boilers for efficiency
  - > switchboard maintenance have good quality switchboards at Mt Piper, but want to maintain to ensure management of any risk. The 2018 fatality at Yallourn was due to a switchboard failure, so the team have completed studies to ensure such an event could not happen at Mt Piper
  - > pump overhauls general maintenance
  - > steam mains repairs bore pipes need upgrading, this involves 40 50mm wall thickness pipes on which welds need to be cut out and replaced due to age
  - > heat exchanger maintenance work to maintain efficiency, need to ensure the cooling oils around the site can feed the water heaters



- > high voltage testing work in a high voltage environment, need to test to ensure integrity of high voltage kit and that it is safe for use.
- » Refer to p. 41 51 of the attached presentation for some images of the turbine stripped during the last outage, as well as other work to be completed.

#### **Wallerawang Sale**

- » Greg explained the Bettergrow Sale Agreement was executed on 30 January 2020, and on completion Bettergrow will acquire the power station lands and the buffer lands.
- » Completion is subject to Conditions Precedent.
- » The Ash Dams hand back negotiations with NSW Treasury are progressing well. On completion, NSW Treasury will re-acquire the KVAR and SSCAD.
- » Refer to p. 53 of the attached presentation for the map showing the Bettergrow purchase area in red, and the Ash Dam handback area in blue.

Brendan asked once the sale goes through, when would Bettergrow be expected on site?

» Greg responded Bettergrow are anticipating to be on site by mid-2020.

Joe asked if there would be no further demolition works until Bettergrow are on site?

- » Greg replied it is possible EnergyAustralia will continue the removal of some salvageable items.
- » McMahon Services, the preferred early contractor, have been on site for four to six weeks completing due diligence. The team still need to work through scheduling, methodologies, programming, managing sensitive receptors such as the church and are expecting a report on heritage buildings this week. Overall demolition will not start until Bettergrow take ownership of the site.
- » The best result is that someone is out there repurposing the site, creating a renewable energy hub and other uses. It looks to be a good use of the land and remaining infrastructure and will bring new employment opportunities and the possibility of protected cropping.

Joe commented it would be good to see opportunities come about like through Chicago Freight in Goulburn. An intermodal could take trucks off the Great Western Highway.

The group expressed strong support for the project, agreeing the possibility of diverse job opportunities is a positive outcome.

» Greg agreed this could be a possible positive land use. Overall, EnergyAustralia are very pleased with the agreement that has been reached from last year to now.

Joe asked to confirm that Bettergrow are also buying the land around Lake Wallace?

» Greg confirmed the land around Lake Wallace is included in the sale, as indicated on the map. However, it will be maintained under terms and conditions of the sale to ensure it remains available and does not become private.

#### **Energy Recovery project**

- » Greg noted as the group has heard continual updates on the project, he expects they know the background. Refer to p. 55 of the attached presentation for details.
- » Greg confirmed the Environmental Impact Statement (EIS) has just come off public display. The exhibition was open for feedback from 13 January to 28 February 2020.
- » EnergyAustralia held several information sessions in Lithgow during the exhibition period.
- » Now the exhibition is complete, responses will be assessed, and all submissions will be made public in a Response to Submissions Report. The project will then be assessed by either DPIE or the Independent Planning Commission (IPC) as appropriate.



» The team is now looking at the concept design to ensure it is correct, then a financial investment decision will be made by EnergyAustralia towards the end of 2020.

Jim asked whether many people attended the information sessions?

≫ Michelle responded there were six information sessions held, and approximately 26 – 29 people attended each session.

Joe commented the project team came and addressed Council multiple times and Mick Hanly has kept Council well updated.

Julie asked whether EnergyAustralia will also be putting money towards the project, and is the project dependent on this funding?

- » Greg confirmed the project is a joint venture, so will be funded by ReGroup, EnergyAustralia and Equity Finance.
- » To progress the joint venture EnergyAustralia would need to provide funding. This will be decided by the end of 2020 - the business needs to ensure there is a commercial value and it is a responsible project to progress.
- » Overall, there are two current streams of decision making:
  - > in relation to statutory requirements, assessment is pending after the response to submissions report, with a decision by the IPC/DPIE.
  - > internally there is a corporate decision-making process, as the project is shaped by the final concept design.

Joe asked whether there is opportunity for Lithgow's waste to be moved back to the city/other areas on the empty trucks that have brought waste to the facility? Should be a win for Lithgow also.

- » Greg responded as the trucks have to come here and unload, they may be able to take some waste back with them. This is something that will be considered as the project
- » Romily (ReGroup project manager) noted in the last meeting that there are initial discussions underway with the Central West group of Councils about options for aggregated demand with waste movement.
- » Brendan noted the Government is currently looking at a state-wide strategy on waste, which will go out for consultation over the next three to four months. This could be interesting for regional Councils as well as metro.

Jim asked whether the plant would have the capacity to process extra waste, as there would already be so much coming from Sydney?

» Greg noted the Energy Recovery facility would only deal with the RDF-sorted waste component - non-recyclable, combustible components. Management of any other sort of waste needs to be dealt with separately.

Jim commented there should be a recycling plant in the central west to support the Energy Recovery facility – increase job opportunities in the local area. Multiple CCC members agreed it would be good to provide opportunities to deal with local waste.

Alex asked if the emissions from the combustion of waste has been addressed?

» Greg confirmed the emissions have been displayed both in this CCC and in the EIS documentation. At a previous meeting Romily presented a profile of the top 20 emission items to the group.

Julie noted the final emission counts will depend on the EPA approval – they will be the decision maker as to what the emissions will need to be reported. As a joint venture, there will be a secondary point of emissions coming off the site and affecting the local area.



- » Greg agreed, noting the emission consideration will be separate to any emissions from Mt Piper Station. The Energy Recovery facility will be a stand-alone emitter.
- » Brendan noted the EIS documentation was required to address the cumulative component of these emissions.
- » Refer to p. 57 of the attached presentation for images of community engagement in relation to the project. The engagement included information sessions, stakeholder meetings, Council tour, stakeholder agency tour etc.

#### 6. **General discussion**

Requests for presentations for 2020:

» Brendan asked whether group members had any points of interest they would like to hear more about during 2020 at the CCC?

Jamie noted he would like to see continued updates on Wallerawang.

Joe agreed, stating the area wants to see the project happen. At each Council meeting an update is always requested – the jobs and opportunities for new industries is something of interest to everyone here. Multiple CCC members agreed.

Julie raised concern with the emergency notification system for neighbours around the station. She asked for clarification about the requirements to notify neighbours, how this occurs, and the timeframes for notification, including how quickly notification would occur in the instance of an emissions failure?

- » Ben responded there is a comprehensive emergency response plan in place this is part of the requirements for the facility is this plan.
- » Michelle responded the timeframe for notification would depend on the type of failure.
- » The station has a list of contacts who have opted to be notified of updates, projects, operations and emergencies. Advertised and door-knocked for this list approx. two years ago.
- » Additionally, there is a list of stakeholders that must be notified within the first hour of an incident at the station. If the incident is of a certain level, the relevant emergency authority will take over.

Julie reiterated her request for clarification of the timespan of general level failures, and asked whether the contact list needs to be updated?

- » Greg confirmed when the CCC is provided an update on the bushfire management plan after review, will also update on emergency management plan more broadly.
- » **ACTION:** EnergyAustralia to include update surrounding neighbour notification and timeframes within CCC update at next meeting.

Jim asked about the transporting of asbestos in steel containers – will they be able to get under the bridge?

- » Greg noted the transporting of asbestos will be managed by the new owner and their subcontractor. However, there are required terms and conditions for handling contaminated material – it will be buried in the same way in containers and covered.
- » There are two types of asbestos material, one type requires a steel container while the other requires standard asbestos management in double-lined, sealed containers.

Julie asked what is the timeframe for moving the asbestos, does it need to be removed or could it remain in its current location, and will the contractors be made to move it?

» Greg confirmed the material needs to be moved – the materials will be moved fully encapsulated within the generators by the salvaging company. The sealed units are loaded without any exposure. The only 'exposure' will occur at the specialist facility where the generators are dismantled.



» Greg confirmed the contractors will have to move it as there is 80 tonnes of copper in the generators – this is very valuable so would not be left on the site.

Joe reiterated the asbestos will remain fully contained and there will be no exposure to the public.

Alex asked in relation to the Energy Recovery project, has there been a list of the type of compounds and products that will be burned?

- » Greg confirmed this has been presented at previous meetings in the presentations Romily provided. The materials used will not be general waste, rather materials from the waste stream that are difficult to recycle arriving in a processed form. Such components could include linen, cottons, contaminated cardboard paper, some plastics, timber and organic materials.
- » The only information the group has not seen is Bettergrow Commercial in Confidence information, otherwise all energy recovery presentations have been in the public realm. Details were also provided in the EIS – hard copies are still available at Wallerawang, Lithgow and Portland libraries.

Julie noted the final compounds will also depend on the EPA's requirements on what is or is not licenced. How often individual emissions will be required to be monitored will also be determined by the EPA.

Jim highlighted emissions should be consistently monitored.

- » Brendan noted it was highlighted in previous presentations that the facility would have 24-hour continuous monitoring.
- » **ACTION:** Alex to provide information around emissions and types of compounds being burned and provide to CCC with the minutes.

Joe raised concern with the pine trees at the end of James Parade. He noted after the fires in Maddox Lane, residents raised concern about the trees. Would the new owners harvest the trees to clear a fire break away from houses? They currently back right on to houses in Blaxland Street.

- » Michelle responded this query has been raised to EnergyAustralia through a letter from the Wallerawang/Lidsdale Progress Association – the station understands it is a large concern of the residents.
- » EnergyAustralia will provide a response to CCC, as well as to the Wallerawang/Lidsdale Progress Association.
- » Michelle noted state forest owns the pines, so EnergyAustralia is not allowed to remove them without approval.

Jim noted during the bushfires, fireballs were coming from an area of pines. They were initially planted to stop the noise and block the view of the site of the power station, however if there is no longer a productive power station, there is no need for them.

- » Michelle noted there is also a need for consideration for the time of harvesting, as it can be a very loud process.
- » ACTION: EnergyAustralia to provide response to question regarding pine trees at the next meeting.

Julie asked in relation to contractors coming to the site to work, what procedures are given to them for the management of native flora and fauna?

» Greg responded all contractors receive an environmental induction before they are able to work on site. All EnergyAustralia employees have also received the same induction.

Julie asked how the delivery of this induction is monitored? Are there cameras throughout the site to monitor activities, including on the ash repository site and native areas?



- » Greg responded the induction is part of the station induction process must be completed before commencing work on site. Additionally, there are tests of knowledge and monitoring of activities that have the potential to cause harm to the environment or wildlife.
- » Certain contractors completing works which specifically may have potential to cause environmental impact must also have their own environmental management plan approved by EnergyAustralia. They are audited on this and monitored.
- » As contractors working on the site, EnergyAustralia becomes personally responsible for their behaviours make sure they follow through with the plans.
- » Greg confirmed there are cameras on the inner perimeter of the power station site.
- » Michelle noted there would not be a lot of cameras on the ash repository.
- Joe raised his thanks to Michelle and Greg for supporting the Wallerawang Fireworks Committee in the cancellation of the Christmas fireworks. It was a common-sense call to cancel them, and the letter from EnergyAustralia expressing their ongoing support was appreciated.
- » Mick Hanly is the primary point of contact for any community issues.
- » For items raised as part of the CCC, contact Alex or Brendan. Please provide any questions by two weeks prior to the next meeting to give EnergyAustralia time to prepare responses.

## 7. **Meeting close**

- » The next CCC meeting is scheduled for Monday 1 June 2020.
- » Meeting was closed at 6:30pm.

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

Greg McIntyre Head of Mt Piper



# **Agenda**

- 1. Welcome and introductions
- 2. Review of Notes From Previous Meeting
- 3. Site Update from EnergyAustralia
- 4. Project updates from EnergyAustralia existing and planned
  - Coal Unloader/Coal Security
  - Outage
  - Expo Upgrade
  - Wallerawang
- 5. General Discussion
- 6. Meeting Close



# **Welcome and Introductions**

# Review of Notes from Previous Meeting

# **Response to Questions**



# **Response to Questions**

Has the report on leaching into groundwater been finalised? Could the results be put into the community newsletter? What has been tested for and what are the locations of possible leaching – testing should be completed on all elements including Chromium 6

- The first phase of the independent groundwater study on the Ash Repository is expected to be finalised in March 2020, including a recommendation of the proposed mitigation control measure for receptors.
- EnergyAustralia proposes to present the water studies and findings to the CCC at its next meeting.



EnergyAustralia has engaged an engineering company to assist in the identification of suitable control measures to ensure any potential impacts to water resources are effectively implemented and managed. EA will be better placed to advise on completion of this work in late 2019 and will be happy to provide an update to the CCC following its completion. Is there an update to this?

- The first phase of the independent groundwater study on the Ash Repository is expected to be finalised in March 2020, including a recommendation of the proposed mitigation control measure for receptors.
- EnergyAustralia proposes to present the water studies and findings to the CCC at its next meeting.



What information and results arose from the surface and groundwater assessments in early 2020?

- The first phase of the independent groundwater study on the Ash Repository is expected to be finalised in March 2020, including a recommendation of the proposed mitigation control measure for receptors.
- EnergyAustralia proposes to present the water studies and findings to the CCC at its next meeting.



## Will EnergyAustralia be organising any renewable energy projects locally?

- EnergyAustralia doesn't have any wind or solar projects planned for Mt Piper.
- Locally we have our immediate project priorities the Energy Recovery project and the Mt Piper Turbine Upgrade planned for later this year.
- More broadly, EnergyAustralia supports clean energy projects with the rights to more than 800MW worth of renewable energy, solar and wind farm power purchase agreements, and half-own the Cathedral Rocks Wind Farm.
- EnergyAustralia also has \$3 billion worth of long-term renewable agreements.



# Complaint about lack of support from EA as fire approached home coming from EA land – fire jumped haul road.

A resident did call during the fires asking for access to Wallerawang. The caller was
unknown to us but it was ascertained that this person was not a member of an
emergency combat agency. We could not provide the access due to safety concerns
and were required to follow the directions of the emergency services.



# **Pine Dale Mine Rehabilitation**



# **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
- There was no damage to infrastructure at Pinedale Mine during the recent bush fires
- RFS was granted access to the site and private haul road to respond to the fire threat.



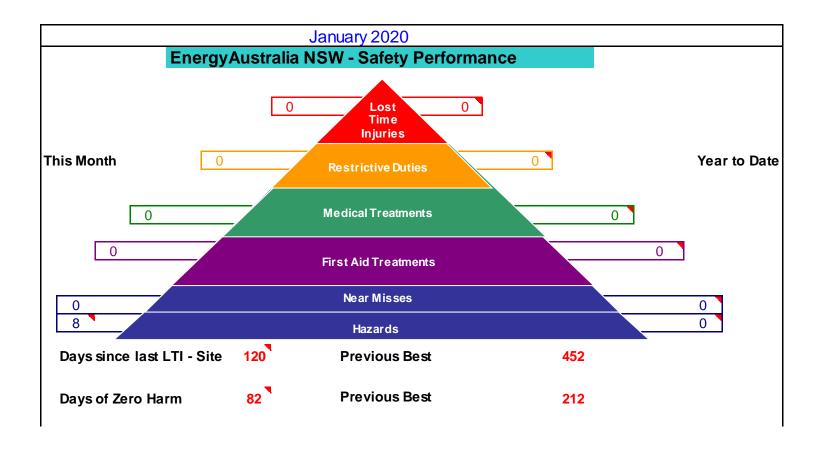




# **Site Safety**



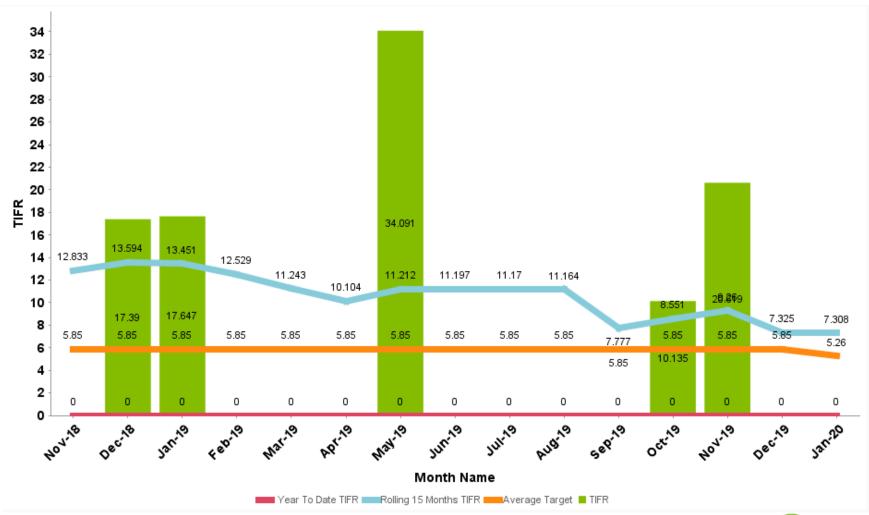
# **Site Safety - March 2020**





# **Site Safety - March 2020**

## **Total Injury Frequency Rate**





# **Update - Water Management**



# **Update on Water Management**

- Oberon Dam level is at 26.6%
- Total Active Storage is at 89.4% with:
  - ◆Lake Lyell at 86.2%
  - ◆Lake Wallace at 104.1%
  - ◆Thompsons Creek Dam at 91.9%
- Lake Wallace has commenced spilling following recent rainfall events
- Amber Blue-Green algae alerts were present at Lake Wallace and Lake Lyell.



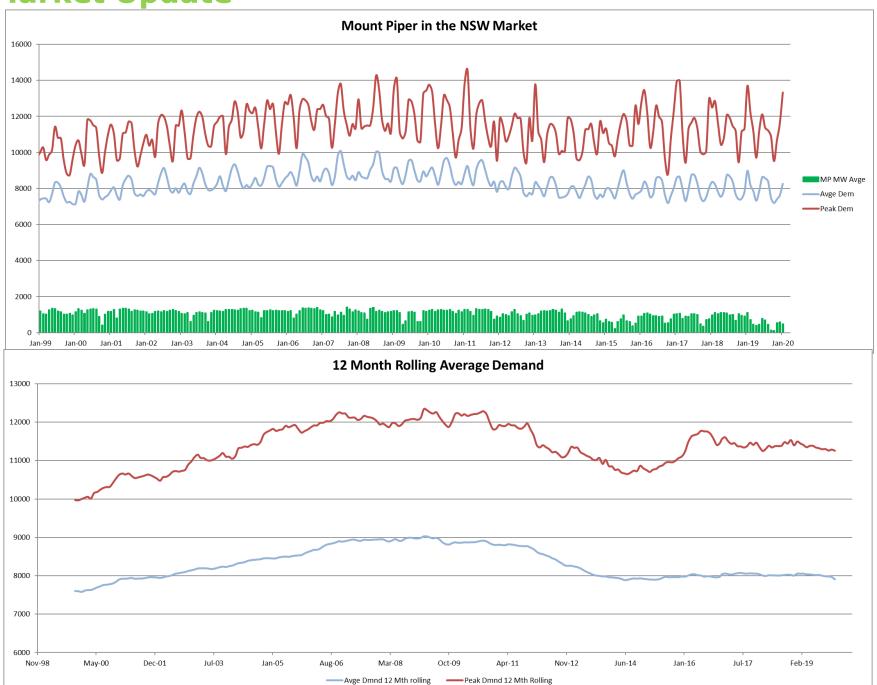
As at August 2019



# **Market Update**



# **Market Update**



Energy Australia

# **Operations (Site) Update**



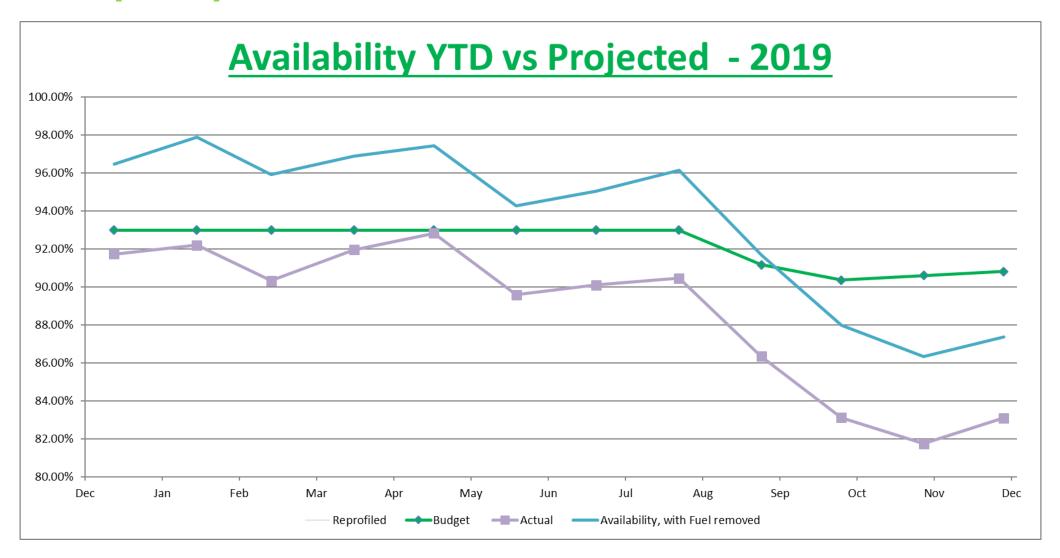
# **Mt Piper Operations**

- No coal constraints.
- Stockpile levels recovered with Springvale recommencing mining and some Airly deliveries.
- MP1 Outage planning in progress.
- Both units suffering some cracking in high temperature components, rectification plan in progress.





# **Mt Piper Operations**





# **Update – Lamberts North Ash Placement Project**



### **Lamberts North Ash Placement Project Update**

- Ash Placement Volume
  - For January & February 2,000 tonnes has been placed on Lamberts North water conditioned ash area.
    - No complaints received
    - No incidents recorded
    - Water Management Plan being reviewed by EA for repository prior to submission to the statuary authorities.





# **Update – Water Treatment Project**



# Joint EANSW/Centennial Water Treatment

**Project** 



- R.O. Plant, OPUS and Brine Crystalliser plants have all passed their acceptance testing.
- The next test will be to carry out the full load test which requires the plant to run at 42Ml/day for a minimum of 24hrs.
- Final optimisation and trimming of the plant is on going. Minor outstanding items lists are being addressed.



# **Community Engagement Program**



### **Community Engagement Program 2020**

### Round 1

- \$30,000 is available,
- Applications open 9 March and close 3 April,
- Advertised in tomorrow's Lithgow Mercury and Village Voice,
- We have added Bushfire Recovery projects and programs to the application criteria for this round.



### EnergyAustralia's Bushfire Response December 2019

- Workplace Giving program open across EnergyAustralia for staff donations for bushfire relief,
- The amount raised will be matched by both EnergyAustralia and CLP,
- \$37,000 has been raised so far
- The total funding comes to \$110,000 with the matching pledges.
- Program is still open until the end of March.
- EnergyAustralia donated \$125,000 to help the communities near our sites affected by bushfire,
- \$50,000 of this was given to the Lithgow Lions Club to support local services for bushfire



### Mt Piper Bushfire Response December 2019

- Locally, EnergyAustralia donated pallets of bottled water and other consumables such as electrolyte drinks and sunscreen to the local RFS,
- Local RFS used the Energy Expo as a respite centre to recover from fire fighting,
- Local RFS used water from Mt Piper to assist with fire fighting in the fire affected areas around the station,
- 833 megalitres of water was released from Lake Lyell to assist fire fighting efforts down stream in the Grose Valley,
- Liaised with local combat agencies to ensure critical staff were safe to come on site to continue to generate electricity.







### **Employment Opportunities**

### **Apprentice Program**

- EnergyAustralia have recruited 3 first year apprentices for 2020. 2 x
   Mechanical and 1 x Electrical.
- We are onboarding an additional mechanical apprentice and 2 engineering trainees

### **New Employees**

- In the period December 2019 to February 2020 one new starter was welcomed to Mt Piper in Operations,
- We are onboarding 2 further positions in fuel coordination and engineering team leader roles,
- We are advertising externally for 2 roles in safety and engineering fields.
- We continue to host 3 Vacation Students to further their studies with practical industry exposure.



# **PROJECTS IN FOCUS -**

- Coal Unloader/Coal Security
- Outage
- Expo Upgrade
- Wallerawang



# Coal Unloader/Coal Security- Project in Focus

- Until now, Mount Piper's fuel supply future had a number of projects working parallel, but independently, in the information gathering and executive briefing stage.
  - Rail unloader :
    - Future necessity
    - Options in size and location, understanding that Piper's Flat is approved, and "shovel ready"
  - Future and alternate fuel supplies :
    - local current,
    - local future, and
    - other regions.
  - Rail infrastructure.



# Coal Unloader/Coal Security- Project in Focus

- 25 November 2019, a project framing workshop was held with:
  - Internal stakeholders and project leads,
  - Internal subject matter experts
  - Current and Future Markets
  - EnergyAustralia's recently appointed major projects team
- Framing workshop was to:
  - Bring all of the parallel activities into a single coordinated project.
  - Define roles and timeframes.
  - Under the leadership of Head of Mt Piper.



# **Coal Unloader/Coal Security - Project in Focus**

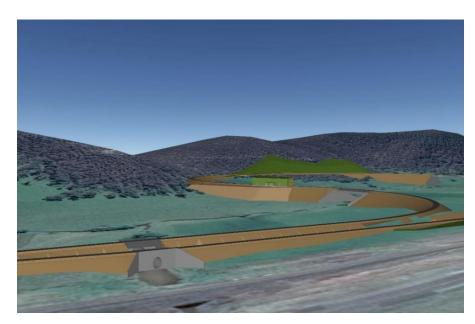
- Mount Piper Coal and Rail Framing Process Identified that:
  - Action is required now to secure fuel for Mount Piper post Springvale's Operations.
  - The answer to Mount Piper's energy security is multi facetted, but not necessarily technically complicated.
  - That Mount Piper has a key role in the transition to a clean energy future
    - In the dark still times
    - In the intraday and seasonal variability of large scale renewables
    - At lower cost to our customers than running gas fuelled peaking plant for extended periods.

## **Coal Unloader/Coal Security - Project in Focus**

### **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



# **Energy Expo Upgrade – Project in Focus**



The Energy Expo is in the process of being revitalised.

Electronic touch screens are being installed allowing access to various content

The bulk of works are now complete, with three displays left to build

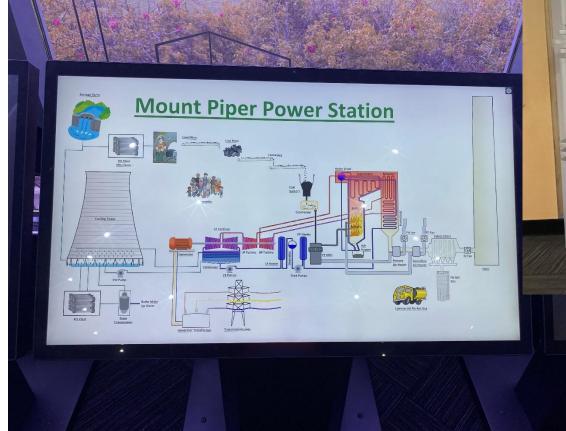
A Virtual tour has been made of Mount Piper allowing less mobile persons to get a birds eye look inside the station.

Works are expected to be finalised in April.

\*\*EnergyAustralia\*\*

# **Energy Expo Upgrade – Project in Focus**

Some New Content







# **Energy Expo Upgrade – Project in Focus**

Some old Favourites





- Mount Piper is planning to be undertaking one of its biggest Outages on unit 1 (planned shutdown for maintenance) in its history this coming October.
- Mount Piper intends to be operational via Unit 2 during this period.
- Works are expected to progress for approximately 10 weeks.
- Toshiba have been engaged to replace turbine components uprating the capacity via efficiency improvements that stem from modern design.



# Some of the Works...



Turbine Upgrade works



# Some of the Works...



Inside one of Mount Pipers Boilers

- Turbine Upgrade works
- Boiler Maintenance





Inside one of Mount Pipers Cooling Towers

- Turbine Upgrade works
- Boiler Maintenance
- Cooling Tower Inspections





- Turbine Upgrade works
- Boiler Maintenance
- Cooling Tower Inspections
- Transformer Maintenance

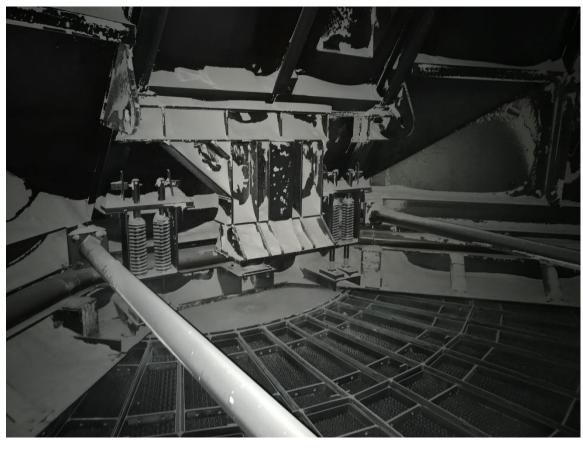




- Turbine Upgrade works
- Boiler Maintenance
- Cooling Tower Inspections
- Transformer Maintenance
- Motor Replacements



Disassembling and ID Fan Motor for removal



- Turbine Upgrade works
- Boiler Maintenance
- Cooling Tower Inspections
- Transformer Maintenance
- Motor Replacements
- Air Heater Maintenance



Inside One of Mount Pipers Air Heaters



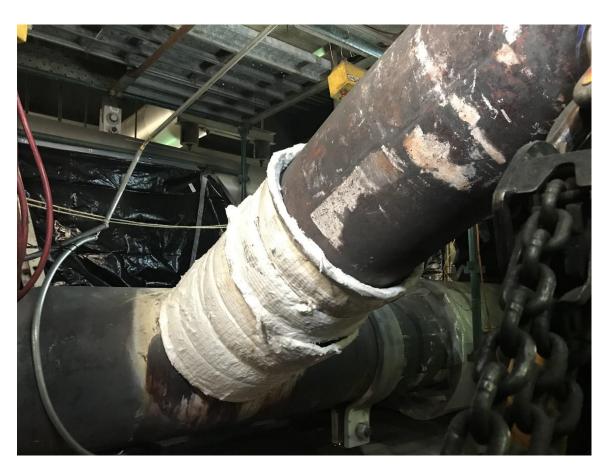
- Turbine Upgrade works
- Boiler Maintenance
- Cooling Tower Inspections
- Transformer Maintenance
- Motor Replacements
- Air Heater Maintenance
- Switchboard Maintenance





- Turbine Upgrade works
- Boiler Maintenance
- Cooling Tower Inspections
- Transformer Maintenance
- Motor Replacements
- Air Heater Maintenance
- Switchboard Maintenance
- Pump Overhauls





- Turbine Upgrade works
- Boiler Maintenance
- Cooling Tower Inspections
- Transformer Maintenance
- Motor Replacements
- Air Heater Maintenance
- Switchboard Maintenance
- Pump Overhauls
- Steam Mains Repairs



Steam Main with insulation removed



2 Electric Feed Pump Fluid Coupling Oil Cooler

- Turbine Upgrade works
- Boiler Maintenance
- Cooling Tower Inspections
- Transformer Maintenance
- Motor Replacements
- Air Heater Maintenance
- Switchboard Maintenance
- Pump Overhauls
- Steam Mains Repairs
- Heat Exchanger Maintenance



# Some of the Works...



Motor Prepared for electrical testing

- Turbine Upgrade works
- Boiler Maintenance
- Cooling Tower Inspections
- Transformer Maintenance
- Motor Replacements
- Air Heater Maintenance
- Switchboard Maintenance
- Pump Overhauls
- Steam Mains Repairs
- Heat Exchanger Maintenance

**Enerav** Australia

High Voltage Testing

# **Wallerawang Sale - Project in Focus**

### **BetterGrow**

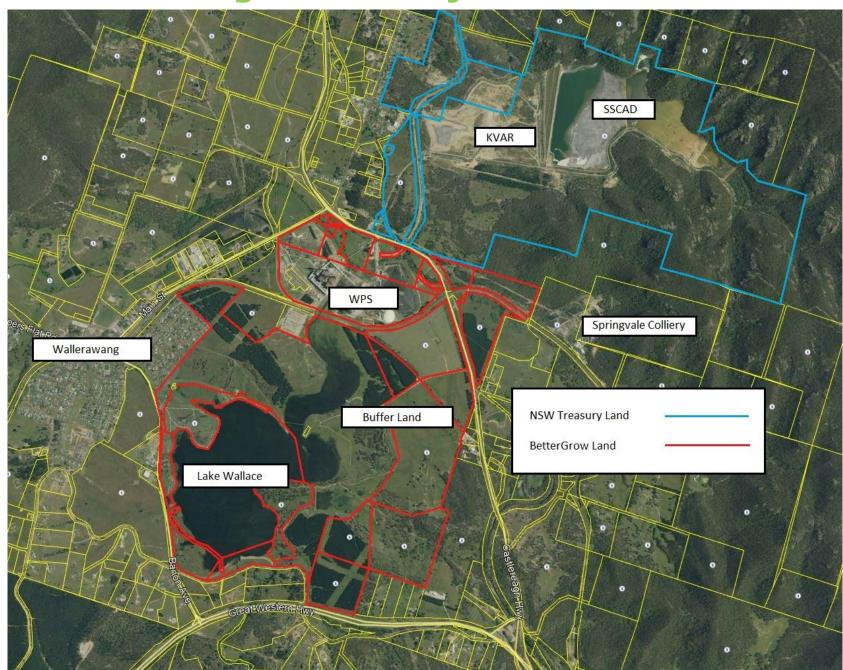
- Bettergrow Sale Agreement executed on 30 January 2020, on completion BG will acquire the Power Station Lands and the Buffer Lands (see map next slide).
- Completion is subject to Conditions Precedent

## **Treasury**

 Ash Dams Hand Back negotiations progressing well, on completion Treasury will re-acquire the KVAR & SSCAD (see map next slide).



# **Wallerawang Sale - Project in Focus**

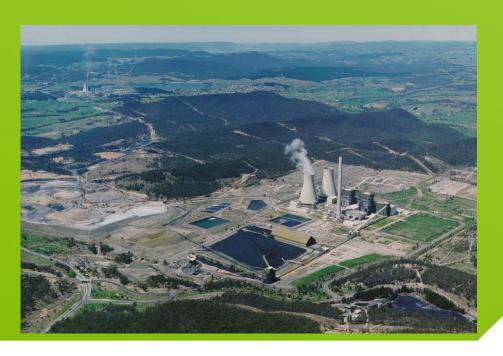




# **Mt Piper Energy Recovery Project**

**CCC** Update

March 2020







### **Background**

- EnergyAustralia and Re.Group are developing a refuse derived fuel (RDF) energy from waste (EfW) plant to improve environmental outcomes and efficiency of coal usage at Mt Piper Power Station.
- EfW is a common technology and has been used in many locations worldwide including Europe, US and Asia.
- \$170 million project which will produce steam equivalent to 30 MW of electricity
- We have completed the Environmental Impact Statement (EIS) for the project. The Department of Planning, Industry & Environment (DPIE) put the EIS on public exhibition between 13 January and 28 February 2020.



The Rudersdorf EfW Plant in Germany uses the same technology, similar fuel and is of similar size to the proposed Mt Piper ERP.





## **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

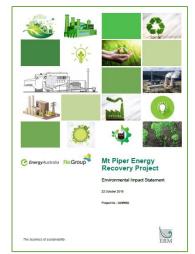
Discuss proposed changes in concept

Explain information presented in EIS

Now that the public exhibition period has finished, all submissions will be made public and we will be asked to respond to those submissions.

After the Response to Submissions, DPIE will prepare an assessment report.

A decision will then be made, either by DPIE or the Independent Planning Commission as appropriate.









# **Community Information (since last CCC meeting)**

 Continued formal and informal briefings to Industry Bodies, Council, Community groups, Organisations as well as individual members of the community.



• Lithgow City Council, DPIE, EPA, and Department of Health attended a site visit on 26<sup>th</sup> Feb.



 Our 10<sup>th</sup> Community Information Day was held on Tuesday 22<sup>nd</sup> Feb at Lithgow Library. Just over 30 locals attended





# Thank you