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AUSTRALIA 2330

Department of Planning, Housing and Infrastructure
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Parramatta NSW 2124

Dear Sir/Madam

Submission – Restart of Redbank Power Station (SSD-56284960)

I have reviewed the proposal to restart the Redbank Power Station and to recommence operations.

I am a professional environmental planner based in Singleton with extensive experience in environmental impact assessment and am affected by the proposal. I request that the matters outlined below be considered in determining the application.

This submission identifies matters of concern and objects to the proposed development.

Is the Redbank restart the same development as currently approved?

An important consideration is the extent to which the current proposal is the same as the original development approved by the Land and Environment Court in November 1994. The proponent seeks to maintain current consent conditions, notwithstanding important and material differences being that:

1. The original consent provided for one fuel source only (namely waste coal tailings), whereas the current proposal would allow many undefined biomass sources from a range of locations and there is no waste disposal arrangement identified.
2. With the calorific value of biomass significantly less than coal, this means to achieve the same level of electricity generation operating on 100% biomass, higher volumes of fuel are required than was originally the case. Also relevant is that the original consent was for electricity generation of up to 120 MW whereas the modified proposal is to allow a peak of 151 MW.
3. The original method of fuel supply was a slurry pipeline on adjacent land approved as part of the consent, later modified to supply coal tailings and product coal by conveyor from the same land. By contrast, the modified proposal would allow biomass to be transported by at least 20,000 heavy vehicles annually travelling on public roads from many unknown and varying locations.
4. Ash waste following combustion was originally disposed of at the Warkworth Mine as part of the approved mine rehabilitation plan. This arrangement formed an essential element of the project. Following the closure of Redbank in 2014, the facility accepting ash waste was rehabilitated and is no longer available for use. Ash from the proposal (from biomass) is now proposed to be transported by road from the site to unknown destinations. Burning biomass is likely to increase the volume of ash due to the lower calorific value compared with the

product coal most recently burnt at Redbank (649.1 kt run of mine coal from Warkworth Mine in 2013). Arrangements proposed for disposal of ash waste in the modification proposal are an essential operational requirement and materially different from those approved in the original consent.

5. The Land and Environment Court orders approving Redbank Power Station noted that the stated and main purpose of the development was to process coal tailings and to process waste, with electricity generation a byproduct. The current application changes this totally, with the main purpose now being electricity generation, not waste disposal.

Significant differences exist between the original consent and the current proposal although the proponent is asking that current consent conditions be retained, other than the 30 year time limited consent period. Extension of the life of the plant is inappropriate and indefinite operation of Redbank is not desirable or necessary.

Adequacy of environmental impact information

While some issues associated with the modification application are adequately documented and assessed in the exhibited documents (eg, stormwater management, on-site traffic management, and Golden Highway intersection design and capacity) key impacts are not:

- Greenhouse gas emissions – The emissions calculations do not take into account the carbon emissions of the project over its full life, and are based on the incorrect assumption that biomass fuel has net zero carbon emissions. No consideration has been given to carbon offsets or alternatives that might assist in production of net zero carbon emissions. Significantly, Redbank is not the best solution to the energy issue. Need to do an energy and biodiversity balance sheet.
- Air quality impacts – The assessment is based solely on modelling with no reference to actual air quality monitoring data for past Redbank operations or regional air quality monitoring data.
- Expected fuel source balance – While the proposal seeks to operate using 100% biomass as a fuel, the proposed consent modification would allow unspecified biomass sources. The balance between these, and therefore the environmental impacts is uncertain and variable over time.
- Heavy vehicle transport of biomass – Up to 20,000 annual truck movements from unknown locations across NSW would have significant transport and traffic effects affecting a large number of local government areas in NSW.
- Disposal of ash waste - Locations and methods of ash waste disposal are an essential component of the proposal but are not specified. There are potential risks from contamination or unauthorised ash disposal when compared to the currently approved proposal where fuel was sourced and disposed of immediately adjacent to the power station using infrastructure that was part of the project approval.
- Removal of infrastructure from the site and end of life rehabilitation - This must be an essential consideration in consideration of the proposal and its environmental impact.

Considering that the original approval was conditional upon a 30 year life from commencement of operations around 2000, it is strange that the application is silent on how long the power station proposes to operate. This is a key factor when reviewing the amendment and its impact.

Is the environmental impact of the modification acceptable?

Relevant matters for consideration in Section 4.15 of the Environmental Planning and Assessment Act 1979 must be reviewed. Important matters for consideration include:

1. *The likely impacts of the development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality*.

   Significant environmental impacts of the modified development are greenhouse gas emissions, air quality impacts, transport and traffic impacts, and the unknown impacts associated with sourcing biomass as fuel for Redbank. Importantly, the application and assessment has not considered whether these impacts can be avoided, mitigated or offset nor identified and considered alternatives that better meet the principles of ecologically sustainable development.

2. *The suitability of the site for the development*.

   The location of Redbank Power Station was determined having regard to its proximity to the Warkworth Coal Mine and other nearby mines. The site location enabled direct supply of fuel and the disposal of ash by pipeline.

   The proposed use of up to 100% biomass fuel means that the former locational advantage of the site is no longer relevant, with the site only suitable for burning biomass because it is an existing facility. With the operational life of the power station limited to 30 years, and closure due in less than 6 years, the suitability of the site for this purpose is questionable.

3. *The public interest*.

   Continuing greenhouse gas emissions from the development is unnecessary, irresponsible and against the public interest. Better alternative sources of electricity are available. The proposed development would allow Redbank Power Station to continue to emit carbon, and also risks increased greenhouse emissions through native vegetation clearing. Major traffic impacts would arise over a large geographic area and incurring considerable public expense in road maintenance costs, plus safety and biosecurity risks.

   Transitioning to zero carbon emissions is essential. The application should only be approved if it is consistent with a credible and realistic transition to zero carbon emissions. This might include carbon sequestration through a tree planting requirement as was envisaged in an original consent condition, though never complied with.

Long term use of Redbank Power Station

In reviewing the modification application, consideration should be given to the long term use of Redbank Power Station and its rehabilitation. It is clear that carbon emissions to the atmosphere are no longer acceptable or required to produce electricity. Requirements to transition to net zero carbon land use and to rehabilitate the site are relevant matters to consider and should form an integral part of the proposal.

The preferred long term use for Redbank Power Station would be to transition the site and infrastructure to a world class mining, energy and geology museum. The site has ideal characteristics for a museum, being sited in an accessible highway location, with suitable road and rail frontages, and located in a mining area in proximity to vineyards and other tourist destinations. The site also has suitable existing infrastructure and facilities to enable this to occur at reasonable cost. This alternative use option deserves serious consideration. For example, Redbank has the potential to be comparable with the Big Pit National Coal Museum in the United Kingdom (https://museum.wales/bigpit/).

Conclusion

With Redbank Power Station having ceased operations in 2014, its reopening will lead to increased atmospheric emissions of carbon dioxide as well as other air pollutants, and consequent impacts on health and the environment.

Granting consent is contrary to global and NSW ambitions to transition to net zero carbon emissions. Amending the consent to allow burning of biomass represents a speculative and poorly substantiated proposal with a significant environmental impact. The original Redbank Power Station application proved to be an unsuccessful experiment, and the modification also represents a risk to the community and the proponent.

I request that my comments be taken into account in the determination of the application. Thank you for the opportunity to make a submission.

Yours sincerely

M Fallding
10 April 2024