Nature Conservation Council
The voice for nature in NSW

27 September 2021

The General Manager
Singleton Council

Via email: council@singleton.nsw.gov.au

Dear General Manager,

Nature Conservation Council Objection to amended DA183/1993.2 / 5.1993.183.2 at 112 Long Point – West Road, WARKWORTH Lot 450 DP 1119428 for S4.56 Modification to allow use of biomass as a fuel source

The Nature Conservation Council of New South Wales (NCC) is the state's peak environment organisation. We represent over 160 environment groups across NSW. Together we are dedicated to protecting and conserving the wildlife, landscapes and natural resources of NSW.

NCC opposes the amended Development Application Modification (DAM) and recommends Singleton Council and the Land and Environment Court reject the application.

As a demonstration of public concern regarding this proposal, over four thousand, four hundred and eighty (4480) Australian citizens signed a petition to Singleton Council and the Land and Environment Court in opposition to the development. The petition with all 4480 signatories names is attached to this submission [Attachment 1].

NCC's detailed submission on the original DAM is still relevant. This submission responds specifically to new information in the amended modification.

The amended DAM does not resolve any of NCC's key concerns regarding the project:

1. The proponent has provided no assessment of the upstream ecological impact of burning native forest biomaterial. These impacts are likely to be significant.
2. The proposed development is not "substantially the same" as the previously approved power station.
3. The greenhouse gas assessment does not accurately address the climate impacts of burning biomass in its calculations.
4. The proposal has significant local traffic impacts.

This project should undergo a full Development Assessment process, where the significant impacts on forests, traffic, air quality and greenhouse emissions can be thoroughly considered.

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Burning native forest biomaterial for energy is strongly opposed by conservation groups because it has harmful effects on threatened species and the climate. Seventy percent of the annual fuel requirements (595,000 tonnes) for this development will be sourced from ‘forestry residues’ from private or public native forestry operations. These 'residues’ include small or defective trees, known as pulp logs. If approved, the demand for timber to fuel Redbank will drive up the rate and intensity of logging in NSW, pushing threatened species toward extinction and worsening climate change.

Your key contact point for further questions and correspondence is Policy and Outreach Coordinator Ishbel Cullen, available at icullen@nature.org.au and 02 9516 4888. We welcome further conversation on this matter.

Yours sincerely,

Chris Gambian
Chief Executive Officer
Nature Conservation Council

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NCC submission on amended DA183/1993.2 / 5.1993.183.2 at 112 Long Point – West Road, WARKWORTH

1. Summary of recommendations

In addition to NCC's previous recommendations on this DA [Attachment 2], NCC recommends:

- that the proponent be required to provide more detailed plans regarding exactly where the fuel will be sourced, including:
    - approximate proportion of fuel derived from public and private native forests,
    - figures of fuel sourced from plantations,
    - key regions targeted by Verdant for biomass recovery and harvesting.
- That the proponent be required to commission an independent assessment of the upstream ecological impacts of the power station based on the detailed fuel sourcing plans.
- that Singleton Council oppose the amended DAM on the basis that the harvesting of 595,000 tonnes of native forest material every year for this project will cause unacceptable impacts on threatened species and biodiversity in NSW by intensifying upstream logging practices, at a time when wildlife in NSW is under strain following the Black Summer bushfires.
- that the consent authority rejects the application on the basis of unacceptable impact on the climate through the degradation of native forests and greenhouse emissions at the point of combustion.
- that the true climate impact of this proposal be considered through further assessments of greenhouse gas emissions utilising methodology which accounts for scope 1, 2 and 3 emissions.

2. Amended Development Application Modification

2.1 Supply Chain and Material Handling report

The proponent's Supply Chain and Material Handling report details how Verdant Earth Technologies is planning to source fuel for the Redbank Power Station by stating:

"that approximately 70% of the biomass sourced for the plant will be obtained from approved forestry residues, 15% from sawmill operations and 15% from uncontaminated wood wastes by weight." (p.7)

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There is not enough forestry residues to supply Verdant with the fuel it requires without a massive increase in the scale and intensity of forestry operations.

Forest residues currently extracted from NSW native forests are small and "defective" trees that are not suitable for sawlogs. These trees are known as pulp logs. Under the NSW Protection of the Environment Operations (General) Regulation 2009, any logs that are harvested as part of approved private or public forestry operations but are considered unsuitable for milling can be harvested, woodchipped and burnt.

EPA guidelines outline the native forest biomaterial that is allowed to be burned for electricity generation:

Native forest biomaterial

The use of native forest biomaterial for electricity generation is regulated through the Protection of the Environment Operations (General) Regulation 2009, clauses 96 to 98. These clauses expressly prohibit the use of native forest biomaterials in electricity generation, but also provide exemptions for certain types of native vegetation or woody waste from the definition of native forest biomaterials.

The material exempted from the definition is able to be burned for the purpose of electricity generation. Native forestry biomaterial can be used in electricity generation if it is:

- invasive native species cleared in accordance with property vegetation plans that have been approved under the *Native Vegetation Act 2003* or an invasive native species order under the Native Vegetation Regulation 2013
- pulp wood logs and heads and off-cuts from clearing carried out in accordance with a private native forestry property vegetation plan or forestry operations carried out in accordance with an integrated forestry operations approval under the *Forestry Act 2012*
- trees cleared as a result of thinning carried out in accordance with a private native forestry property vegetation plan or an integrated forestry operations approval.

More information can be found at www.epa.nsw.gov.au/licensing/natforestbiofuel.htm

Source: EPA Eligible Waste Fuel Guidelines)

This DA proposes to source 595,000 tonnes a year of 'approved forestry residues' biomaterial directly from our forests as fuel.

In 2019, 14,442 dry tonnes of pulp logs (20,341 m^3) were harvested in NSW North Coast public forests covered by the Coastal Integrated Forestry Operations Agreement (CIFOA). In 2020 this declined to 9151 tonnes (12,890 m3)[i,ii].

Procuring 595,000 dry tonnes of forestry residues every year requires more than a forty-fold increase in the harvesting of pulp logs across the region.

Where there is no demand for pulp logs, these often smaller and younger trees are left standing during logging operations because it is uneconomical to harvest them. For example, since the Newcastle woodchip terminal closed, the extraction of 'pulp logs' on the

north coast dropped to almost 10 percent of pre-2013 levels. Rates of logging in NSW native forests almost halved.

The proposed modification to Redbank power station would recreate a market for native forest material.

Previous experience in southern NSW and in Victoria, according to Professor David Lindenmayer, an Australian National University specialist in forest ecology and logging, is that when markets for waste and chips were developed they tended to become self-sustaining and intensified logging practices."[iii]

Consultant forest ecologist Dr Andrew Smith stated in a Sydney Morning Herald article published in September 2021 that:

"the last thing you want anywhere in Australia is a new market for low value, high-volume product because that's what's destroying the environment."[iv]

Increasing the intensity of harvesting in forests has many negative impacts. The removal of small and crooked living trees that are currently left standing during logging operations and provide crucial habitat, has inflicts cumulative harm on species whose homes are already being cleared.

The Black Summer bushfires saw many forest-dependent threatened species lose large fractions of their habitat. Remaining forests have become important refuges for these species. Further incentives to clear forests will endanger wildlife and push threatened species closer to extinction.

Whilst more detail is provided on the source of biomass fuel for the power station than the original DAM application, the information presented is not sufficient because it does not specify timber sources. Without this, it is impossible to provide a clear picture of which forests, under which tenures, will be threatened by this proposal.

Recommendation: the proponent be required to provide a further breakdown of exactly where the fuel will be sourced, including:

- approximate proportion of fuel derived from public and private native forests,
- figures of fuel sourced from plantations,
- key regions targeted by Verdant for biomass recovery/harvesting.

Recommendation: That the proponent be required to commission an independent assessment of the upstream ecological impacts of the power station based on the detailed fuel sourcing plans.
Recommendation: that Singleton Council oppose the amended development application modification on the basis that the harvesting of 595,000 tonnes of native forest material every year for this project will cause unacceptable impacts on threatened species and

biodiversity in NSW by intensifying upstream logging practices, at a time when wildlife in NSW is under strain following the Black Summer bushfires.[v]

2.2 Greenhouse Gas Emissions and Air Quality Impact Assessment

The Greenhouse Gas Emissions and Air Quality Impact assessment report in the DAM states the following:

"Under a business as usual (BAU) scenario (ie if biomass fuel was not used at Redbank), forest residues would remain in place and would either decompose naturally or be burnt. DPI (2017) presented a life-cycle assessment of GHG emissions associated with the use of biomass from native forests from the three North Coast hubs. The BAU scenarios considered included 100% decay, 100% burning and a 50/50 mix. The GHG emissions associated with the harvest, transport processing of residues were also counted, as was the conversion to electricity.

When avoided emissions due to the displacement of fossil fuels are taken into account, the net GHG emissions associated with the use of biomass for electricity generation results in approximately 70% less GHG emissions than the BAU scenario (DPI 2017). In other words, even when CO2 emissions from the burning of biomass are accounted for, there are GHG benefits associated with energy production from biomass."[vi]

There are significant flaws in this approach to assessing the greenhouse gas impact of biomass.

Fuel sold to Redbank will not be genuine waste.

The proponent's approach to assessing greenhouse gas emissions assumes that all fuel provided to Redbank will be waste such as offcuts from sawmills. This assumption directly contradicts the proponent's Supply Chain and Material Handling report, which states that only ~125,000t will be sourced from 'sawmill waste'.

The assessment approach also assumes that the total 850,000 tonnes of biomass required to fuel the power station every year would be rotting, decomposing waste on the forest floor if it was not burnt for fuel.

Yet, 70% of the fuel for Redbank will come from forestry operation residues. Entire trees and logs will be cut down that would otherwise remain standing, continuing to absorb and store carbon.

Forest derived biomass is not carbon neutral or renewable.

The proponent continues to utilise carbon accounting which considers CO2 emissions from biomass as net-zero, demonstrated in Tables 8.1 and 8.2 in the Air Quality Impact assessment report.

This approach is widely accepted as inaccurate.

In February 2021, over 500 scientists from around the world signed an open letter to the leaders of the United States, EU, Japan and South Korea condemning forest derived biomass because it is not carbon-neutral and because it draws subsidies and investment away from genuine green energy sources.[vii]

The carbon footprint of forest derived biomass is explored in greater detail in Section 2.3 of NCC's original submission to the DA Modification [Attachment 2].

Recommendation: that the consent authority rejects the application based on unacceptable impact on the climate through the degradation of native forests and greenhouse emissions at the point of combustion.

Recommendation: that the true climate impact of this proposal be considered through further assessments of greenhouse gas emissions utilising methodology which accounts for scope 1, 2 and 3 emissions.

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[i] Forestry Corporation of NSW, Biomaterial report 2019, available at https://www.forestrycorporation.com.au/__data/assets/pdf_file/0004/1190515/FCNSW_Biomaterial-Report_F19.pdf

[ii] Forestry Corporation of NSW, Biomaterial report 2020, available at: https://app.powerbi.com/view?r=eyJrIjoiYTljYzM2NzktZTE2ZC00NDJmLTg0ZWYtN2JjOGI3NzI4MGExIiwidCI6IjdlODcyMjA5LWY3MGItNDU3OC1hNzk5LTA4YTdjZjAzODI3NSJ9

[iii] https://www.smh.com.au/environment/conservation/renewable-energy-firm-backs-return-to-woodchip-exports-from-newcastle-20210908-p58pzk.html

[iv] https://www.smh.com.au/environment/conservation/renewable-energy-firm-backs-return-to-woodchip-exports-from-newcastle-20210908-p58pzk.html

[v] EPA, 2020. Update on forestry activities and regulatory activities. Available at: https://www.epa.nsw.gov.au/your-environment/native-forestry/bushfire-affected-forestry-operations/update-september-2020

[vi] Air Quality Impact Assessment Redbank Power Station LEC proceedings no. 2021_128111. 2021. Pg 19

[vii] Statement available at: https://www.dropbox.com/s/hdmmcnd0d1d2lq5/Scientist%20Letter%20to%20Biden,%20von%20der%20Leyen,%20Michel,%20Suga%20&%20Moon%20%20Re.%20Forest%20Biomass%20(February%2011,%202021).pdf?dl=0