

Submission in respect to Major project MP06–0228–Mod–23

Shoalhaven Starches – Modification 23 Gas Fired Co-Generation Plant

This submission replaces my previous submission.

This submission objects to the proposal on the grounds that 470,000t/y CO₂e is utterly acceptable given the climate crisis we all face. In addition, the assessment does account for the Scope 2 emissions arising from the source and supply of the gas. Alternate none emitting energy sources are available and in time present less risk and a financial benefit.

Primary Comment.

The Green House Gas Assessment (GHGA) Technical Report (Appendix 8) is an inadequate representation of the proposal and consequently misrepresents the magnitude and significance of the GHG emissions.

1. The GHGA presents a comparison of single year of emissions when the commitment to gas as the primary energy source ensures emissions will continue for decades. Emissions will accumulate in the atmosphere throughout the operational life of the proposed Plant
2. Consequently, this single year comparison takes no account of the impact of the total mass of emissions which will occur over the life of the Plant. As identified in the GHGA, emissions will have an impact, for assessment purposes, of 100 years.
3. The failure to assess the aggregate emissions over the life of the Plant results in the misrepresentation of alternate energy sources. Additional options, including renewable electricity supply for a period equivalent to the co-generation plant forecast life must be assessed.
4. It is clearly inconsistent, and therefore misleading, to take account of the Scope 2 emissions arising from the purchased electricity but to ignore the Scope 2 fugitive emissions not only from the gas supply pipeline but also the entire source process of the gas supply. These fugitive emissions are methane with an elevated global warming potential. Over time these Scope 2 fugitive emissions are likely to increase as the source of gas moves to unconventional sources. The opposite is the case for purchased electricity.
5. Table 3.5 and Figure 3.1 seriously misrepresent the reality that the commitment to gas as the primary energy source.
6. This statement in 3.3.1;

‘ the impact of increases in annual greenhouse gas emissions is minor in the context of Australia’s greenhouse gas emissions as a whole.’

Is completely unacceptable, misleading and at odds with the process of GHG emissions accumulating in the atmosphere throughout the entire life of the Plant thereby intensifying the climate crisis. To commit to increase emissions over an extended period of potentially decades with such a dismissive statement is unconscionable, contrary to the universal commitment to radically reduce emissions. That a professional assessor, informed of the harm caused by the accumulating GHGs in our atmosphere, made such a statement, in the full knowledge of the climate crisis, is shameful.

In the first 10 years of operation this proposal would result in additional 4,700,000tCO_{2e} in our atmosphere. Inconsequential! Really!

All emissions are damaging and effectively permanent in the consequence of the heating which ensues. Every additional gram of GHG is accumulative and damaging. The proposal to develop a new source of emissions, which is intended to continue for decades, will result in a substantial and permanent addition to the damage arising from Climate Change.

The GHG emissions from this proposal cannot be dismissed as inconsequential if we, collectively, are to have any chance to stabilise our environment.

Discussion

We are all challenged by the urgent need to eliminate GHG emissions as soon as possible. The UN has called for a 30% reduction in methane gas emissions in the next 9 years. The responsibility to act falls on us individually and collectively. None can avoid their obligation to protect our environment for the wellbeing of humanity, the realisation of a sustainable society and for the continuation of enterprises such as Shoalhaven Starches.

My Primary Comment is made in the context of the current state of our atmosphere, the trajectory of GHG concentrations, the threatening consequences of Climate Change and the awareness that each and every gram emitted is, effectively, permanently adding to these threats.

The statements and urging of the Queen, our Head of State, at COP26 for urgent action should cause Shoalhaven Starches to reflect on their proposal and change their energy supply strategy.

To highlight the context, I reference this extract from an article in The Guardian – 26th October 2021,

Climate crisis: greenhouse gas levels hit new record despite lockdowns, UN reports

.....*The concentration of carbon dioxide, the most important greenhouse gas, **is now 50% higher than before the Industrial Revolution** sparked the mass burning of fossil fuels. **Methane levels have more than doubled since 1750. All key greenhouse gases (GHG) rose faster in 2020 than the average for the previous decade** and this trend has continued in 2021, the WMO report found.*

*The data shows the climate crisis continues to worsen and send a “stark” message to the nations meeting at the Cop26 climate summit in Glasgow in a week’s time, according to WMO chief Prof Petteri Taalas: **“We are way off track.”***

*The negotiators at the summit must deliver action to keep alive the goal of ending GHG emissions by 2050 and avoiding the worst climate impacts. **Only stopping emissions will stabilise the levels of the gases and halt the temperature rises that drive the increasing damage from heatwaves, floods and droughts.***

*“At the current rate of increase in GHG concentrations, we will see a temperature increase by the end of this century far in excess of the Paris Agreement targets of 1.5C to 2C,” said Taalas. **“[Rising levels of GHGs] have major negative repercussions for our daily lives and wellbeing, and for the future of our children and grandchildren.”***

To proceed with a long-term commitment to gas as the primary energy source is contrary to the need to protect humanity from the existential threat of Climate Change. We have a common duty of care, the very essence of the foundations of our society and democracy. This proposal will result in substantial and permanent harm. It must not proceed.

Our State Government has committed to a 50% reduction in emissions by 2030. To meet this commitment requires that decisions made today are consistent with supporting the realisation of emissions elimination whenever and wherever possible. The proposal prejudices our collective object and is indeed consequential.

The commitment to gas appears at odds with the risks that are readily apparent for this energy source. AEMO have identified uncertainty for the supply of gas from the Bass Strait source as soon as 2025;

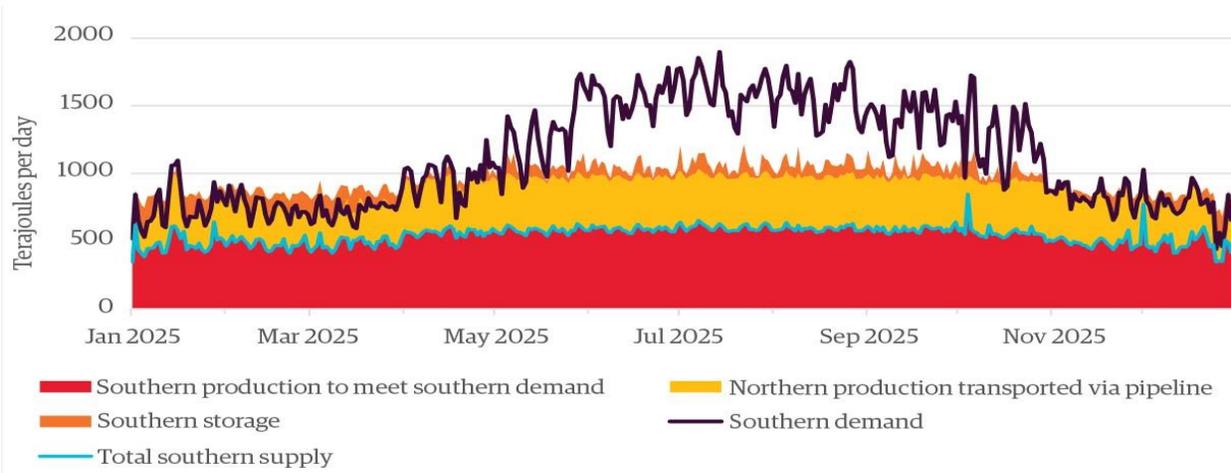


Figure 2. Predicted 2025: AEMO's predicted 2025 gas supply and demand for the southern states. Southern production is dramatically reduced and southern demand exceeds supply. Source: aemo.com.au/en/energy-systems/gas/gas-forecasting-and-planning/gas-statement-of-opportunities-gsoo

The AEMO forecast is that the supply of gas from the Bass Strait will not be sufficient to meet demand. The consequences of this, in terms of risk assessment, are;

- the potential of supply failure,
- the potential for price increase,
- the potential for alternate sources, unconventional gas extraction and/or importation of gas. Either of which substantially increase the Scope 2 emissions.

In addition to the supply risks there is a further risk;

- the potential, in time, for a charge to be placed on emissions - as currently being called for by the IMF and the OECD. Such a risk cannot be wholly discounted. The EU current emissions price is 50Euro/tonne. A staggering financial risk.

Any competent risk assessment addressing these factors against the alternate of renewable electricity, which has none of these risks and is forecast to continue decreasing in cost, would determine not proceed with gas as the primary energy source.

Objection

I have every expectation that Shoalhaven Starches have made substantial commitments to proceed with the Co-generation plant. However, the GHGA is demonstrably seriously flawed and inadequate in not assessing alternate energy sources, the full extent of Scope 2 emissions and, more critically, the aggregate emissions over the life of the plant.

I plea, yes plea - an emotional urging - for the sake of our obligation to protect each other - our collective duty of care – that Shoalhaven Starches change their approach to the primary energy source for their expanded operation and maximise the use of renewable electricity, as other major industrial installations are doing.

To proceed with gas is not only commercially risky, but it also presents an unacceptable significant contribution to the causes of and harm arising from Climate Change. An existential threat.

The proposal for gas to be the primary energy source for the expanded production at Shoalhaven Starches must not proceed.

Robert R Hayward B.Sc. Hons

42 Browns Mountain Road

Tapitallee, NSW 2540