Hunter Power Project (Kurri Kurri Power Station) SSI-12590060-Mod-3

I am writing to voice my objection to Modification 3, to increase the use of diesel as fuel for the Kurri Kurri Power Station by over 600%. The reasons for my opposition are as follows.

Diesel not the answer in a climate crisis

I was and remain opposed to the Kurri gas plant, for the reasons given in my original objection. Of particular relevance, we are in a climate crisis and the next 10 years are critical to reduce emissions – the International Energy Agency has told us there can be no new fossil fuel power projects or new fossil fuel extraction projects if we are to achieve net zero emissions by 2050. To reach zero emissions by 2050, we must replace retiring fossil fuel generation with zero emission technology, not gas that will run for 30 years, emitting 15 million tCO2 e over that time. Running this plant on diesel only increases the greenhouse gas emissions, and I don't support it for that reason alone. Governments need to stop propping up the fossil fuel industries and support zero-emission alternatives like off-shore wind, and storage, both large scale and domestic, to get us through high demand periods and failures in supply for whatever reason.

We know that gas is expensive and makes electricity expensive too. We know that this plant running on gas will not drive down power prices in NSW. There is no analysis of the impact on the price of electricity from running it on diesel. Or should we be asking at what price Snowy Hydro will start it up?

Is this actually a modification?

The "modification" is not minor. In fact, perhaps it is not a modification? The change in operation on diesel is from 175 cumulative hours to 1100 cumulative hours. To put this in perspective, this is going from a maximum of 7.3 days per year to 45.8 days per year. Going from only a week to a month and a half. This is a significant change. Bear in mind that this is for both turbines. If the turbines operate singly rather than concurrently, it is a change from a fortnight to 3 months on diesel, subjecting residents to noise, traffic, air quality impacts, that weren't there previously, over a significant period.

Impact of start-ups/shut-downs

The Scoping Report says “The broad approach to the modification assessment is to pro-rata the relevant quantified impacts in the EIS for the proposed increase in the maximum permitted hours of diesel fuel operation.” This might be suitable if there is a linear relationship, but there may not be. Emissions and impacts are often worse during start up and shut down – how will this be quantified?

No level of $PM_{2.5}$ safe for human health

The modification will result in residents of Cliftleigh, Heddon Greta, Kurri, Gilleston Heights and beyond being exposed to emissions of $PM_{2.5}$ particulates, for which there is no safe level for human health, for a significantly greater period of time. This is through no fault of the residents, rather the ridiculous decision to locate a gas fired power station in an area with no gas supply, necessitating a 21 km pipeline to be constructed.

The Hydro aluminium smelter ceased operations in 2012. The vast majority of newer houses in Heddon Greta, Cliftleigh and Gilleston Heights have been built since that time. The residents of these houses haven’t had to put up with industrial impacts since moving to the area. Why should they suffer the greater impacts of diesel operations for longer than allowed in the original consent? What other alternatives have been considered? What about a rebate to encourage the uptake of home batteries?

The Modification Report concludes for $PM_{2.5}$ “With the lower 2023 background conditions, Table 6.7 shows how the maximum 24-hour and annually averaged cumulative concentrations at the most-affected sensitive receptor would remain below both the 2022 Approved Methods impact assessment criteria and the NEPM advisory goals. This outcome shows how background levels (rather than contributions from the project) dominate cumulative levels at surrounding sensitive receptors.” There is, however, no explanation of why the $PM_{2.5}$ in 2023 is so much lower than the previously adopted background concentration of 24.9. Just as we know the level was high during the bushfires

in 2020, perhaps this is an abnormally low figure? Surely a longer-term average for background concentration would be a more realistic comparison?

The background concentration of $PM_{2.5}$ is no doubt a combination of emissions from diesel equipment used in coal mines, dust from haul roads and stockpiles, power stations up the valley etc. If every development argues that they are just a small part of the problem, and consent authorities fall for it, the situation will never improve.

Large emitter **should be treated as such**

The Scoping Report says "The greenhouse gas emissions assessment that will be prepared to inform the modification report will consider the draft guide despite it not yet being in force." As Snowy Hydro is a Government-owned agency, I would expect it to comply with the direction of the Government in the *Greenhouse Gas Assessment Guide for Large Emitters.* The Kurri gas plant was premised on firming renewables to ultimately decrease GHG emissions - it would be absurd not to comply with this guide.

By the time they get to the Modification Report, however, they have decided "As the guide remains in draft format and is not yet official NSW Government policy, it is not currently applicable to either the project or the proposed modification." This is despite acknowledging that the project meets the 3 criteria to be classed as a "large emitter".

I can only assume they looked at the implications of being a "large emitter" and didn't like what they saw. How will we ever control rising global temperatures, including our own, if we don't tackle large emitters?

Increase in tanker traffic not insignificant

The Modification Report states "The EIS estimated that refilling (or emptying) of the diesel fuel storage tanks would generate a maximum of 12 B-double tanker movements per day (comprising six inbound trips and six outbound trips) between approximately 8:00 am and 4:00 pm. This would need to increase in 2025 to a maximum of 24 tanker movements per day (12 inbound trips and 12 outbound trips) between 6:00 am and 6:00 pm in the event that the number of hours of operation on diesel fuel is high." This increased tanker

traffic can continue for up to a week after the power station has run on a diesel feed, presumably to refill the storage tanks.

Doubling the number of trucks while increasing the operating time by half may not sound like a lot, but the potential to impact traffic leaving the Hunter Expressway is high. Following completion of the Hunter Expressway, Gingers Lane, Frame Drive and Orange St became a shortcut to Abermain and Cessnock. A major upgrade of this route has now been completed, increasing the volume of traffic on this road. I have seen traffic in the left lane of the Hunter Expressway come to a standstill due to a delay in traffic being able to turn onto Hart Rd as they leave the Hunter Expressway. A diesel tanker waiting to turn right onto Hart Rd has the potential to cause further delays at this intersection. Slowing or stopping on a 110km/hr road is obviously dangerous and this hazardous situation will likely occur more frequently.

GHG emissions 80% higher on diesel

"The proposed modification would result in an about 80 per cent increase in greenhouse gas emissions compared to an update of the scenario for year 1 emissions presented in the EIS. This is due to the combustion of diesel and because the proposed modification would entail an increase in the maximum number of operating hours during the first year." As noted earlier, the Kurri gas plant was premised on firming renewables to ultimately decrease GHG emissions. To increase emissions by 80% compared with the gas operation is unacceptable as it is undermining the good done by the renewables they are meant to be firming.

Have all other options to avoid burning more diesel been considered? When are the "big" batteries coming online? What is being done to increase energy efficiency and decrease consumption?

Snowy Hydro also owns the Colongra gas fired power station and also a diesel peaking plant in HEZ. How often have these facilities been used since Liddell Power Station closed? Could Colongra start up earlier and run for longer?

If their use hasn't increased, it suggests there is no need to hasten the start-up of the Kurri gas plant by running on diesel.

Water demand doubled

The Modification Report states “Water — Operation on the gas turbines on diesel fuel consumes more water than operation on natural gas. The proposed modification would result in the consumption of up to about 235 megalitres of water in 2025 based on each gas turbine operating for 1,100 hours on diesel fuel. This is 155 megalitres more than the EIS estimated power station water demand of about 80 megalitres per annum based on each gas turbine operating for 876 hours on natural gas and 175 hours on diesel fuel. The increase in water demand in 2025 would not require an increase in the rate at which Hunter Water has agreed to supply water to the power station.” It might be within the agreement, but 155 megalitres more water still needs to be found, and delivered. Where is it coming from and what is the impact on quality and supply for other nearby consumers?

Lack of community consultation

The Modification Report tells us that “Snowy Hydro has engaged with the NSW Environment Protection Authority and Cessnock City Council during preparation of this modification report.” Where is the consultation with the surrounding community? The assumption is that the previous EIS looked at the worst-case scenarios, including 100% diesel firing. This does not however take into account changes which the locals may be aware of, or impacts they may have experienced during the construction phase eg noise, traffic, air quality, which may have been greater than predicted in the EIS and require consideration in the Modification Report.

Conclusion

I urge the Department of Planning to reject this proposal. The 80% higher ghg emissions largely replace the emissions avoided by associated firmed renewable energy projects. Governments need to look beyond propping up fossil fuel projects with even worse fossil fuels and get on with zero emission alternatives and storage.