GAS FREE HUNTER ALLIANCE

Supporting community action to resist the proposed Kurri Kurri gas power plant

Objection to the Kurri Kurri lateral pipeline project

Executive summary

The Gas Free Hunter Alliance and our thirteen member groups object to the Kurri Kurri lateral pipeline project on four key grounds:

1. The gas storage pipeline will not be able to carry hydrogen
2. The project facilitates the unnecessary and polluting Hunter Power Project
3. Other environmental impacts of the pipeline
4. It is significantly more expensive than the commonwealth government initially budgeted

Details of our objections

1. The gas storage pipeline will not be able to carry hydrogen

Despite clear statements from Snowy Hydro executives and the Hunter Power Project's (HPP) EIS that the gas plant will run on a hydrogen blended fuel in the future, the lateral pipeline EIS shows the storage pipeline does not have the capacity to carry hydrogen.

Since the Federal government's proposal of the HPP in 2021, a consistent justification for the gas plant has been its ability to run on a hydrogen blended fuel in the near term and (with expensive upgrades) 100% hydrogen in the future. The energy market is rapidly shifting to renewable energies so the HPP's ability to run on hydrogen is necessary for it to be utilised in a decarbonised future to avoid it becoming a stranded asset.

In the HPP EIS there were numerous references to attempts to ensure that the power plant will be able to run on hydrogen blended fuel:

> "Gas peaking plants would need to be hydrogen ready, which would mean that the plant is capable of running on a mixture of hydrogen fuel for a minimum proportion of its operating time each year. Most of the potential gas turbine equipment suppliers for this Proposal are continuing to investigate the use of hydrogen as a fuel and have tested operation with a blend of up to approximately 20-30 percent hydrogen in gaseous fuels on some of their large industrial frame machines (similar to this Proposal). There is the potential for the Proposal's gas turbines to be fired on a certain percentage of hydrogen in the future when the technology and infrastructure becomes more economic, but this would require some modification to the power station and gas turbine."

And:

> "As is now required under current NSW energy policy (see Section 4.3.3), most of the potential gas turbine equipment suppliers for the Proposal are continuing to investigate the use of hydrogen as a fuel and have tested operation with a blend of up to approximately 20-30 per cent hydrogen in gaseous fuels on some of their large industrial frame machines (similar to this Proposal)"

Furthermore, in February this year the Australian Labor party pledged that if they form government at the 2022 federal election the HPP will run on 30% hydrogen from the day it is operational.

Even within the Kurri Kurri lateral lateral pipeline EIS, the importance of the HPP being hydrogen ready is recognised:

> "The transmission pipeline will also be designed, constructed, commissioned and operated in accordance with the requirements of ASME B31.12-ASME Design code for Hydrogen Piping and Pipelines, in order to maintain readiness for potential use of hydrogen in the east coast gas network."

Yet despite the clear importance of the HPP being able to be run on a hydrogen blended fuel, the lateral EIS makes it clear that the storage pipeline will be unable to carry even the smallest amount of hydrogen:

> "With regards to the gas storage pipeline, a significant increase in capital expenditure would be required to construct the storage pipeline for it to be capable of storing a hydrogen blended fuel. This is due to the dimensions of the gas storage pipeline, and construction materials and methods required to mitigate the increased embrittlement of pipeline material when storing a hydrogen blended fuel. Snowy Hydro have advised that the associated level of capital expenditure would be uneconomic, and consequently the storage pipeline will not be built to specifications that would enable it to store hydrogen blended fuel."

If in the future, it is decided that the HPP should run on a hydrogen blended fuel (a highly likely scenario as shown above) the storage pipeline would need to be rebuilt and be subject to a second planning approval. This would significantly increase the cost of the project (as will be further discussed), increase the environmental impact and would mean that in its current form, the storage pipeline would not be able to fulfill its expected "operational life of 30 years."

2. The project facilitates the unnecessary and polluting Hunter Power Project (HPP)

The sole justification for the Kurri Kurri lateral pipeline is that it is needed to supply the HPP with gas. The HPP is a fossil fuel plant that will pump at least half a million tonnes of CO2 equivalent emissions into the atmosphere each year for 30 years, further fueling climate change.

It is beyond believable that the lateral's EIS states the HPP will "Contribute to the net reduction of greenhouse gas emissions in the energy sector by providing ongoing firming of intermittent renewables." This is a sleight of hand from an accounting perspective as it makes a claim on the emissions reduction of other generators. The HPP remains a polluting fossil fuel project, facilitated by this pipeline, that could easily be replaced for a cheaper, cleaner large scale battery storage project. Many experts agree, including the government's own energy advisor AEMO that the HPP is not needed.

The lateral pipeline facilitates the HPP which contradicts both the NSW's government's net zero target and the Australian government's obligations to commit to, and reduce, greenhouse gas emissions. In 2020 the Executive Director of the International Energy Agency warned governments around the world that investment in fossil fuels needed to be phased out immediately. Given that the lateral pipeline has an operation life of 30 years and will not be green hydrogen ready, it should not proceed.

In the lateral pipeline EIS it is claimed that:

“The Project is considered to be consistent with the principle of intergenerational equity as it can be carried out in a way that would maintain the health, diversity and productivity of the environment now and into the future.”

However we know that this claim is false. On top of the environmental impacts of the pipeline itself, the project facilitates the HPP which, as articulated above, will have severe climate impacts and hence will not maintain the health of the environment and is not consistent with the principle of intergenerational equity.

Further to this, the high cost of gas has been driving up electricity prices and this will only get worse if we dig deeper into our dependence on polluting and expensive fossil fuels.

This HPP has received consistent local and national opposition since its announcement, and a petition against the HPP (which our group coordinated) received 35,000 signatures. We know that the HPP is not wanted here in the Hunter, the experts and the market are telling us its not needed and hence we believe the lateral pipeline should not be built either.

3. Other environmental impacts of the pipeline

The Biodiversity Assessment states “The Development Footprint occurs in a small (0.4 ha) area mapped as “important habitat” of the Regent honeyeater (Anthochaera phrygia).” Given this bird population is critically endangered, none of their habitat should be destroyed. It is simply not good enough to incrementally destroy the habitat of critically endangered animals and consider the impacts of this project on the Regent honeyeaters in isolation.

In regards to the pipeline itself, it is well understood that gas pipelines fail, either by soil erosion, creek bank degradation or poor quality welding. When they fail, gas (which is 95-98% methane) leaks into the air. Methane is a far more potent greenhouse gas which means it has a global warming potential far greater than carbon dioxide. An international team of research scientists has found big errors in estimates on how much methane is escaping from gas companies’ operations.

The pipeline will also devalue the properties of landholders whose property the pipeline will go through. The 50m and 25m wide construction footprint will involve the clearing of trees and bushland and will mean that any crops or plants with roots deeper than 900mm cannot be planted above or near the pipeline.

4. It is drastically more expensive than the commonwealth government initially budgeted

When the HPP was initially proposed, the gas pipeline was estimated to cost $100 million. However, in the lateral EIS it is revealed the project is expected to cost $264 million. This doesn't include likely costs in the future to upgrade the pipeline to be able to hold a hydrogen blended fuel.

The cost to the commonwealth government will also be significantly higher than the $264 million as the government owned Snowy Hydro will have to pay the additional costs to cover APA's profit margin. This will mean the project will cost drastically more than was initially expected and budgeted for. With the additional $600 million of the HPP (likely to similarly blow up to a far greater cost), the HPP and lateral pipeline is a waste of tax-payers money and hence should not be built.

Conclusion

In summary, the Gas Free Hunter Alliance objects to the Kurri Kurri lateral pipeline project on the grounds that the gas storage pipeline will not be able to carry hydrogen, it facilitates the unnecessary and polluting Hunter Power Project, numerous other negative environmental impacts and the massive budget blow out which will fall back on the taxpayer.

About the Gas Free Hunter Alliance

The Gas Free Hunter Alliance was launched in May 2021 to unite and coordinate 13 Kurri Kurri, Newcastle and the Lower Hunter groups and their increasing opposition to the Hunter Power Project. Gas Free Hunter Alliance represents Kurri Kurri locals and Hunter residents concerned about climate impacts and people fighting the gas pipeline. It is supported by Traditional Owners of the Wonnarua Nation**.**

Acknowledgement of Country

The Gas Free Hunter Alliance would like to acknowledge the traditional custodians of the country on which we live and work, the Wonnarua, Awabakal and Worimi people and pay respect to their Elders past, present, and future.