SSI 12590060 - Hunter Power Project: Modification 3

I object to this modification.

Through misinformation and disinformation, a view was formed that there could be power shortages before renewable power and storage systems are fully implemented. It is fact that these perceived power shortages lead to this power project, a project of no interest to private investors. The government of the day then nominated the Snowy Hydro Corporation, 100% government owned, to proceed with the project.

The Hunter Power Project was sold to the nation as a quick response power generation facility to operate only during times of expected power shortages.

The original application and approval for the project were for "an open cycle gas fired power station (which) would primarily be fired on natural gas with the use of diesel fuel as a backup."

Emphasis must be placed on the original application's approval to use diesel fuel only as a "backup", not as a fuel for up to eleven hundred (1100) cumulative hours commissioning.

Purpose of the proposed modification

The Department of Planning, Housing and Infrastructure emailed a letter dated 16 September 2024, presumably to everyone who made a submission on the original project. This letter informs of a proposed modification "To allow use of diesel fuel for the purpose of generating electrical power from up to 175 cumulative hours per calendar year to up to 1,100 cumulative hours during the first year of operation to facilitate commissioning of the project in late 2024."

The Scoping Report, attached to the same Major Projects website, is in the form of a letter dated 31 July 2024 from the Project Director – Hunter Power Project. The Scoping Report repeatedly described the proposed modification as a "minor" modification.

In the modification application the question is asked "How is the modification substantially the same as the original development?" This question was unanswered. The only conclusion that can be drawn is that the project is not substantially the same as the approved project and therefore not a "minor" modification.

This proposed modification is not "minor". It is an attempt to override the intention of the approval by allowing diesel fuel to be used, not as a backup fuel, but rather as the primary and probably only fuel in 2025, year 1 of the project's operation. Calendar year 2025 may well be a year in which this facility is not need to be operated at all for power generation.

Fuelling the power plant

The undue haste has resulted in the power plant probably being completed at least a year before the gas supply pipeline is completed. Therefore, without gas, the modification asks for operation of the facility for up to 1100 cumulative hours on diesel fuel during calendar year 2025.

1100 cumulative hours is in excess of 6 weeks, 24 hours per day or equivalent such as Monday – Friday, 8 hours per day for more than 6 months, running on diesel fuel.

The scoping Report acknowledges condition A9 of the conditions of approval of the original project. Condition A9 states "Fuel burning equipment must not be fired on diesel for the purpose of generating electrical power at the premises for more than 175 cumulative hours per calendar year."

It seems obvious that there is no provision in the project's approval for relief from provision A9 for the purpose of commissioning of the plant or any other purpose. It must therefore be assumed provision A9 applies to all use of the power plant.

It is noted that condition A9 uses the phrase "must not". It does not state "should not".

Water supply for the site

The project site has no independent water supply. Therefore, the only source of water supply is from the Hunter Water Corporation. Hunter Water is implementing a recycled water system but it is not presently available to or near the site. So, the only water source currently available to the project site is potable water from Hunter Water's reticulated system.

Hunter Water's website states "Our water levels drop faster than most other major Australian urban centres during hot, dry periods because we have shallow water storages and high evaporation rates."

Grahamstown Dam is Hunter Water's major water storage facility for the Lower Hunter Valley. Hunter Water's website states "In July 2024, we took the interim action of reducing the top water level at Grahamstown Dam to around 90%, since then, a decision has been made to take further steps to increase community safety. The interim top water level in Grahamstown Dam is now being reduced to about 82% capacity, this is so that the risk to the community near the dam is even lower in the event of an earthquake that damages the dam's embankments."

This safety procedure means there is now a drastic reduction in capacity available to the Lower Hunter Valley.

Water consumption

Residents of the Lower Hunter Valley are constantly asked to conserve water. Every bill is accompanied by exhortations to limit showering to 4 minutes, to make 'smart water choices' and that 'Every Drop Counts'.

The Snowy Hydro Modification Report: Use of diesel fuel during first year of operation, dated 5 September 2024, states in the Executive Summary, page ii, that "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." The conclusion is that this equates to a water consumption rate of approximately 210kl per hour of the plant running at 100% load.

Questions

In a worst-case scenario, at what rate can Hunter Water supply water to this project without negatively impacting existing customers?

For how long can this level of water supply be maintained?

In the event of low rainfall, storage levels will drop. If water restrictions are commenced, will the project be required to cease operation?

Hunter Water tells us that Every Drop Counts. So why is it even considered acceptable for, possibly, hundreds of megalitres of precious potable water to be used, wasted, simply to commission an unnecessary fossil fuelled power plant ahead of the completion of the gas supply pipeline?

Gas turbine power generation is not a new, untried technology. So why is there the need for up to 1100 hours commissioning time?

As diesel is the least desirable fuel to power the project, why is commissioning of the plant being sought before the primary fuel is available to the site?

As the generators will be producing power during the commissioning it is assumed that power will be fed into the grid. As the real cost of generating this power will be far higher than other generation available at the same time, will the additional cost be borne by the end user?

Conclusion

This major modification is unacceptable for the following reasons: -

The intention of the original approval was to power the site using natural gas with the ability of using hydrogen when available.

Diesel was approved only as a standby fuel to power the project, presumably when there is insufficient gas supply available.

Diesel operation requires copious quantities of water to process the combustion gasses.

The only water available to the site is potable water from Hunter Water's reticulated system.

Hunter Water's major storage facility, the Grahamstown Dam, will soon be operating with reduced storage capacity of no more than 82% full.

There is no convincing evidence that commissioning of the plant must occur before the gas pipeline is completed and commissioned.

For the above reasons, this modification must be refused.