Submission to Environmental Impact Statement (EIS) for the proposed Kurri Kurri gas power station

Lesley Hodges, 8 June 2021

Summary and Conclusions

This proposal would have a significant environmental impact and **should not be approved**.

The reasons for this include:

1. **Contribution to climate change** - Gas is one of the biggest drivers of climate change.

This proposal has been partly justified as an alternative to coal fired energy but gas is also very polluting and a significant contributor to climate change. There are a lot of myths that gas is less polluting than coal but overall this is not the case.

To avoid worsening impacts of climate change, there can be **no new fossil fuel infrastructure** built anywhere in the world, including this gas power station.

Even the International Energy Agency has said this very recently.

The Federal Environment Minister must consider the impacts that this proposal will have on climate change.

2. **No proper assessment of alternatives in the EIS**.
3. **Impacts from extraction of gas that would be used in this power station (**especially if fracking involved) including:
    a) Deleterious effects on our limited and vital water resources
    b) Negative impacts on agriculture
    c) Negative impacts on threatened species.
4. **It will be polluting** – evidence is showing that gas can contribute to severe health problems as well as the major contribution to climate change.
5. **It's unnecessary:** With clean, dispatchable power already on the way, including big batteries, Australia's Energy Market Operator (AEMO) has said we don't need new gas projects to meet demand on the electricity grid. There are many better alternatives.
6. **It's expensive:** A new gas station won't reduce power prices in NSW.
7. **It would be unreliable:** Existing gas power stations rarely turn on and can break down in heatwaves.

8. **It won't create jobs:** the Kurri Kurri power station is expected to provide just 10 ongoing jobs. More jobs and better energy reliability could be achieved by investing in sustainable renewable energy.

Critical matters that are not properly addressed in this submission

The EIS does not address a number of critical matters and **this should be rectified before the proposal is assessed.**

These critical matters that are not adequately addressed include:

1. There is no assessment of the proposal's contribution to climate change from its Green House Gas (GHG) emissions. The fact that the Federal Court recently made the finding that Federal Environment Minister has a duty to protect young people around Australia from foreseeable future climate means that the Environment Minister must take into account impacts on climate change from developments such as this. Assessment of climate impacts must be included in the EIS for this reason, and because Australia has made a commitment under international agreements.

2. The treatment of alternatives that would generate lower emissions and is grossly inadequate. For example, there is no reference to pumped hydro, gravity storage, or converted solar thermal options. The treatment of the alternative of battery storage is inadequate and should not be dismissed.

   This proposal is being justified as being required to provide dispatchable power using gas and diesel(!) as a transition to renewable energy technologies. However, there is no need to use gas as a transition in this instance (and many others). This would be apparent if the treatment of the alternatives in the EIS was properly addressed.

3. There is no discussion of Australia's commitment to reduce its GHG emissions.

Detailed Comments

<u>International and National Law</u>

Australia has signed up to greenhouse gas emissions targets (the Paris Targets) under the United Nations Framework Convention on Climate Change.

This gas fired power station **will not reduce emissions**. Especially if it operates on diesel sometimes.

Australia is **not on track** to meet these targets (despite misinformation to the contrary by the Federal Government). Allowing this project to go ahead would arguably be contrary to Australia's international agreements.

(Note the EIS has not even got the name of the convention nor what the Australian Government has signed up to under this convention.)

See also my comments below under Policy Settings, below.

Federal Law

The recent judgment in the Federal Court of Australia that found the Federal Environment Minister has a duty of care not to cause them harm from climate change has implications to this proposal.

In Sharma and others v Minister for the Environment, the Federal Court accepted evidence brought by independent experts that carbon emissions released from mining and burning fossil fuels will contribute to wide-ranging harms to young people.

This judgement means that the Federal Environment Minister has a duty to protect young people around Australia from foreseeable future climate change harms and that the Environment Minister should not make decisions that would harm young people.

There are less climate-polluting alternatives to this proposal and not all of the alternatives have been set out in the EIS, as discussed.

Climate change

I am gravely concerned about the impacts that climate change is already having on our country and about predicted impacts that we are getting a taste of. Australia is one of the particularly vulnerable countries to the impacts of climate change.

Everybody should be gravely concerned – especially our Federal Government whose role it is to protect our national interests and national security.

In the last couple of years floods, ice storms, on-going drought and horrific bushfires have showed us what we are in for. Drought is still prevalent in many areas of Australia and is among the worst on record in some areas.

We have not yet seen too much impact from the following but increasingly higher sea levels will affect a lot of critical infrastructure in Australia and high temperatures will affect the operation of critical services such as electricity transmission and will melt roads and buckle railway lines. This will be highly disruptive to life as we know it. High temperatures and drought conditions are already affecting the breeding of stock and will have increasing harmful impacts on human health.

Storms this last year in coastal NSW and Western Australia have to cause further beach erosion and damage to property.

There will be more deaths and morbidity, more adverse mental and physical health impacts, more economic chaos and disruption to our lifestyle. Not to mention the impacts of climate change on native and agricultural animals and plants.

The Corona virus crisis is nothing to the disruption that global climate change will cause if Governments and individuals do not make changes to the way we have done things in the past.

It is critical that Governments work harder to reduce the drivers of climate change ie GHGs.

Coal and gas extraction, processing and use are very high contributors to GHGs. Recent research has highlighted that it is not only the CO2 emissions that are problematic but that coal and gas also add significantly to methane emissions. This is another argument against the extraction and use of these fossil fuels because methane has a far greater impact on global climate change than CO2. Gas also releases significant fugitive emissions.

Existing coal and gas fields will push the world past globally agreed temperature goals without adding more. There is no room, or need, for more. The rapid development of battery storage technology, and other methods of producing dispatchable power and the improvements and changes to transmission makes renewable energy sources, backed by appropriate non-fossil fuel a far cleaner option than developing more gas.

Reputational Impact

The fact that this proposal is being largely funded by the Federal Government will cause Australia reputational damage in the international community. Many of whom see Australia as impeding progress to lower global emissions.

Such behaviour by the Federal Government increases the chances of the EU and others imposing Carbon tariffs which could have a negative impact on the state and national economy.

Similarly, the reputation of the NSW government would be impacted if people understand that this proposal is not in line with its stated Greenhouse Gas reductions targets.

Greenhouse Gas (GHG) Assessment (15.4)

The GHG assessment is inadequate. It makes no mention of the context of importance and significance of GHG although there is passing reference to the policy settings (Table 15.8).

And no mention of climate change despite the fact that is what most of these policy documents are about.

This is also despite the fact that arguably the most significant environmental impact from this proposal would be the increase in GHG emissions with a consequent negative impact on climate change.

There is no discussion (as there critically should be) of the impacts of GHG on **climate change**. This is despite the fact that arguably the most significant environmental impact from this proposal would be the increase in GHG emissions, with a consequent negative impact on climate change.

One of the few direct references to climate change in the EIS actually discounts the influence of climate change on bushfire risk 10.2.3:

"This scenario reflects the two largest fires depicted in Figure 10.5 and based on these experiences, might be expected to occur once every 10-20 years, not accounting for the influence of climate change. 10.2.3

There is one reference that makes a mention of possible changes in flooding risk due to climate change, 14.2.5.

The EIS should explain the significance of GHG to climate change and why this is important. And make some assessment of the impact of the proposal on Australia's Carbon budget.

The importance of the concept of a Carbon budget is an important one because there is only a limited and known further amount of Carbon that can be released into the atmosphere, after which the world cannot avoid catastrophic climate change. The EIS should have discussed this concept and the role the proposal would have in spending the national and global carbon budgets.

The effect of GHGs arising from the proposal should also be put in the context of social impacts.

Alternatives

There is not sufficient discussion or treatment of alternatives to this proposal. Some examples not even mentioned are:
- pumped hydro – in which the proponent, Snowy Hydro, has some experience.
- gravity storage
- converted solar thermal.

Gravity storage uses energy generated and peak renewable energy times to raise large blocks of concrete or other material. These materials can be used to generate energy when they are released downwards. Using the same principles as regenerative braking in electric vehicles. Abandoned coal mine shafts could be used for this purpose.

The treatment of battery storage is not adequate.

Justification

The EIS states in E.8. "The objective of the Proposal is to provide dispatchable capacity and other services into the NEM, and to meet demand when the needs of electricity consumers are highest. "

However valid alternatives to the proposal are either discounted or ignored.

The EIS does not present a valid justification for this proposal.

In fact, there is no justification for the development of a new gas fired power for dispatchable energy in the current climate. There is especially no justification for the use of a new facility that uses highly polluting diesel.

I understand that this facility would only be used from about 2 – 10% of the time. This means that there are even more other alternatives that should be considered.

The reliability of gas fired power stations reduces significantly in heat waves – which will become more frequent. This issue should be discussed in the EIS.

Specific comments on parts of the EIS

15.4.1 **Policy Settings**
The treatment in the EIS of international and national law and policy settings is inadequate.

The EIS states:

> "Additionally, consideration of current NSW, national and international policies and regulatory frameworks relating to greenhouse gas emissions have been applied for the assessment. These policies are listed in Table 15.8. "

However, I could not see any text or discussion as to how the proposal fits into any the policy settings. And there should be.

There was no statement that Australia has made a commitment to the Paris Climate Targets from the Paris Climate Conference, CoP 21. I presume in table 15.8 they mean the United Nations Framework Convention on Climate Change, COP 21 held in Paris in 2015.

The Paris Agreement is a **legally binding international treaty on climate change**. It was adopted by 196 Parties at COP 21 in Paris, (including Australia) on 12 December 2015 and entered into force on 4 November 2016.

It is noteworthy that the EIS in Table 15.8 or elsewhere does not refer to any Commonwealth GHG or climate *policy*. Is this because either the EIS left this policy out of the list or because the proponent could not find any Federal Government GHG or climate policy?

The EIS lists some NSW Government documents and policies but it does not discuss how the proposal fits into NSW climate change policies.

There is also no context setting for the presentation of predicted other pollutant levels. This is a deficiency in the context of the known incidence of respiratory disease which may be linked to the level of such pollutants in the Beresfield and wider Hunter region.

Section 23.1.4 Economic costs and benefits

"More broadly, the Proposal would facilitate the generation of dispatchable electricity and network services identified as critical to energy security within the NEM. This would support the transition to a low carbon energy future by allowing increased renewable energy generation. "

While the proposal would facilitate the generation of dispatchable energy there have been strong opinions by some players in the energy industry that this proposal would have negative impacts on the energy market by distorting free market processes.

The transition to a low carbon energy future does not need this proposal. There are currently available lower carbon alternatives to this proposal which should be used if there is a market-based need for such a facility in this location.

Section 23.3 Ecologically Sustainable Development

"23.3.1 The precautionary principle

This principle states: 'if there are threats of serious or irreversible damage, lack of scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation'.

No threats of serious or irreversible damage have been identified, nor are considered likely as a result of the Proposal. Nor have any environmental safeguards or mitigation measures been postponed due to a lack of scientific certainty. "

The EIS has not identified any serious or irreversible damage from the proposal however I disagree with this assessment. The EIS states that there will be increased GHG emissions resulting from the proposal. These will contribute to serious and, at this stage, irreversible damage to our climate systems.

"**23.3.2 Intergenerational equity**

The principle states: 'the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations'. "

Due to the negative impacts on climate change and the increases in other pollutants, and other impacts relating to the extraction of the gas to power this plant, I disagree that the health of future generations is being maintained by this proposal.

Section 23.4 Summary and conclusion

I disagree with the statement: "Key environmental issues were considered and potential impacts on those issues assessed"

One of the most important key environmental issues of our time - ie climate impacts was not considered and any references to the issue of climate change was minimised.

I do not believe the EIS achieved it stated result of: "This EIS provides a description of the Proposal, existing information on environmental context and potential for environmental impacts ".

This is because critical information on environmental context and the potential for environmental impacts is completely missing from the assessment. As discussed above, this includes context for GHGs with respect to climate change and other pollutants with respect to health issues.

The impacts of GHG emissions produced by the proposal on both Australia's emissions and climate change *must* be included.

Additional Comments on the EIS

<u>Proposed conditions – general statement</u>

Conditions are often imposed on developments to attempt to, or be seen to attempt to, mitigate identified or potential impacts. Such conditions are often not met, and are rarely monitored. If they are broken this results in the impact occurring after all and there are rarely any consequences for the proponent, or restitution for the environment or people who have suffered from these impacts.

This should be borne in mind whenever a development is approved subject to conditions.