



**AUSTRALIAN PARENTS
FOR CLIMATE ACTION**

Australian Parents for Climate Action

Submission to the NSW Department of Planning, Industry and Environment re:

Hunter Power Project (Kurri Kurri Power Station)

9 June 2021

Australian Parents for Climate Action
c/o Environmental Leadership Australia
Level 2, 69 Reservoir Street
Surry Hills NSW 2010

Email: info@ap4ca.org

Australian Parents for Climate Action represents over 14,000 parents, grandparents and carers from across Australia, including 4,300 residents of NSW, many in the Hunter Electorate. We are Australia's leading organisation for parents advocating for a safe climate. Our supporters are from across the political spectrum, across all Australian electorates, and from varied socio-economic positions. We seek non-partisan responses to climate change and its impacts.

We advocate for Australian governments and businesses to take urgent action to cut Australia's carbon emissions to net zero as quickly as possible. We encourage Australia to take a leadership role on the world stage, leading by example and calling for other nations to take the necessary action to protect our children's futures.

For more information, visit www.ap4ca.org

This submission was prepared by a NSW-based group of volunteers and approved by Marie Carvolth, Chair of Australian Parents for Climate Action.

Submission

Snowy Hydro is proposing to build a “peak load”, 750MW gas-fired power station at Kurri Kurri in the Hunter Region. The station will cost \$610 million and proposes to operate for only 7-8 days a year (2-12% of maximum load), when Federal Ministers expect existing power sources to be incapable of producing enough electricity to meet national demand.

Australian Parents for Climate Action representing its 14,000 national supporters, including over 4,300 in NSW, ***strongly oppose*** the Hunter Power Project for the following reasons:

1. The project is incompatible with NSW Government’s legal and moral obligations, including its emissions reduction targets and principles of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).
2. The proposal makes no economic sense. It commits \$610 million of taxpayer funding to infrastructure that the energy sector has already deemed unnecessary, and that will sustain just 10 jobs a year.
3. The project will adversely impact air quality and consequently the health and wellbeing of local families and the Hunter community.

1. The Kurri Kurri Power Station is incompatible with state climate targets and the EPBC

Australian Parents for Climate Action opposes the Hunter Power Project because it will prevent the NSW Government from meeting its own climate targets, to the detriment of the species, ecosystems and people that it is required to protect.

According to Snowy Hydro’s Environmental Impact Statement, this project will emit an estimated 500,000 tonnes of greenhouse gases (GHGs) per year when fully operational.¹ This will severely impede progress on the NSW Government’s Net Zero Plan, under which the state needs to reduce emissions by 35% between 2005 and 2030, and achieve net zero emissions by 2050.² For context, the NSW Government is spending a total of \$105.5 million to divert some 200,000 tonnes of food and garden waste from landfill each year, avoiding around 500,000

¹ Snowy Hydro (2021), [Hunter Power Project Environmental Impact Statement](#), Table 15.14: Proposal Emissions Summary.

² NSW Government (2020), [‘Net Zero Plan Stage 1: 2020-2030’](#).

tonnes of annual emissions. All emissions reductions from that initiative will be nullified by the proposed Kurri Kurri Power Station.³

Academics, industry experts and global policymakers are recognising the need for fast, decisive climate action if we are to limit global warming to 1.5-2 degrees Celsius as required by the 2016 Paris Agreement.⁴ This is because most GHGs, once emitted, remain in the atmosphere and continue to contribute to heating for tens to hundreds of years, so any delays in climate action will magnify the challenge we will face in coming years.⁵ According to the International Energy Agency, “there can be no new investments in oil, gas and coal, from now – from this year” if governments are to reach net zero by 2050.⁶

Given the Hunter Power Project’s detrimental impact on the climate, it cannot be approved without contravening NSW’s legal and environmental obligations.

The Federal Court in May ruled that the Commonwealth minister presiding over the proposed extension of a Gunnedah coal mine had a duty of care to protect young people from foreseeable future climate change harms (Sharma v Minister for Environment 2021).⁷ Justice Bromberg’s ruling established a clear link between fossil fuel projects and the catastrophic harms of climate change, and must be considered in the context of the Kurri Kurri proposal.

The NSW Government is also bound by the Commonwealth EPBC Act, which is designed to protect the environment, and especially animals, plants, habitats and places that Australia deems to be of national significance.⁸ These Matters of National Significance are listed by the Commonwealth Department of Agriculture, Water and the Environment, and include:

- Green turtles, which are now born almost completely female, with 116 females born per male, because of warmer temperatures;⁹
- Mountain pygmy possums, which hibernate for up to seven months under snow in alpine NSW and are now under threat from habitat loss and warmer temperatures;¹⁰
- The Great Barrier Reef, which is in “critical” condition after successive climate change-driven coral bleaching events in 2016, 2017 and 2020;¹¹

³ NSW Environment Protection Authority (2021), [‘\\$4.7 million to boost food and garden waste recycling and research in NSW’](#).

⁴ United Nations (2015), [Paris Agreement](#).

⁵ Joshi, K (2021) ‘Why Delay Does Damage’.

⁶ The Guardian (2021), [‘No new oil, gas or coal development if world is to reach net zero by 2050, says world energy body’](#).

⁷ Federal Court of Australia (2021), [‘Judgement of Bromberg J in Sharma v Minister for the Environment’](#)

⁸ Commonwealth of Australia and The State of NSW, [‘Bilateral agreement under sections 45 of the Environment Protection and Biodiversity Conservation Act 1999 \(Cth\)’](#).

⁹ WWF (2018), [‘Green turtles and climate change’](#).

¹⁰ Australian Academy of Science (2015), [‘Climate change and biodiversity’](#).

¹¹ International Union for Conservation of Nature (2020), [IUCN World Heritage Outlook 3](#).

- And many others: the International Union for Conservation of Nature (ICUN) last year reported that climate change was a threat in 11 of 16 Australian World Heritage sites, including the Great Barrier Reef.¹²

We cannot protect our environment without addressing climate change, and the emissions that the Kurri Kurri Power Station proposes to produce over its 30 years of operation will exacerbate the climate emergency Australia now faces. Australian Parents for Climate Action and our supporters assert that NSW cannot justify or approve any new project that increases emissions.

2. The proposal is uneconomic and unnecessary; cleaner, better alternatives already exist

Australian Parents for Climate Change opposes the Hunter Power Project because we do not want our tax dollars wasted on infrastructure that economists, energy industry experts, power companies and the Australian Energy Market Operator say does not make economic sense.

The Hunter Power Project was initiated by the Morrison Government to fill a potential supply shortfall after the Liddell power station closes in 2023-24. The proposed station will have a maximum capacity of 750MW, which exceeds the Morrison Government's estimate of a 250MW shortfall.¹³ According to the Australian Energy Market Operator (AEMO), whose data informs government estimates, the shortfall will be even smaller at 154MW.¹⁴

AEMO's data shows that a new gas power plant is not needed. Instead, the market operator expects the projected shortfall to be met by four battery projects announced as part of the NSW Government's Emerging Energy Program in September 2020, which would add a total of 170MW of dispatchable capacity to the grid.¹⁵

In addition to the state-supported battery projects, the private sector has also in recent months announced major renewable energy projects that will increase dispatchable capacity, including AGL's proposed 500MW battery at Liddell.¹⁶ There are already policies in place to balance supply and demand of energy in Australia without the need for large-scale intervention. These include the Retailer Reliability Obligation, which requires power retailers to ensure renewable generation that they contract is firmed, and demand management contracts, which have since 2009 paid large power users to curtail their energy use during periods of high demand.¹⁷

¹² ABC News (2020), '[Great Barrier Reef outlook worsens to 'critical' as climate change named number one threat to world heritage sites](#)'

¹³ The Guardian (2020), '[Scott Morrison refuses to commit to net zero emissions target by 2050](#)'.

¹⁴ AEMO (2020), [2020 Electricity Statement of Opportunities: A report for the National Electricity Market](#).

¹⁵ Ibid and NSW Government (2020), '[NSW to lead the charge on big batteries](#)'.

¹⁶ RenewEconomy (2020), '[AGL seeks approval for 500MW big battery at site of Liddell coal generator](#)'.

¹⁷ Australian Energy Regulator (2019), '[Retailer Reliability Obligation](#)' and Australian Energy Market Commission (2009), '[Demand Management](#)'.

Allowing Snowy Hydro to intervene with a taxpayer-funded gas-fired station is counterproductive — private sector operators say that it sends the wrong signals to the energy market, creating uncertainty and crowding out private investment in more appropriate solutions.¹⁸

From a policy perspective, **the proposal contradicts NSW Government's Electricity Infrastructure Roadmap**, which commits to transitioning NSW's electricity sector to one that is "cheaper, cleaner and more reliable". The Kurri Kurri proposal is not clean, especially with it running on highly polluting diesel until a gas pipeline is built. It is not cheap, given rising wholesale gas prices and competition from renewables.¹⁹ As NSW Energy Minister Matt Kean publicly stated in May: "Using gas to create electricity is a really expensive way to do it. If you're interested in driving down electricity prices, then you'd be mad to use gas."²⁰ Nor is it necessarily more reliable, given its reliance on a pipeline that is yet to be built and on prices set by the notoriously volatile international gas market.

3. Hunter families deserve better, safer air after already suffering \$600 million a year in health costs from coal-fired stations

Australian Parents for Climate Action opposes the Hunter Power Project because it **further damages air quality in the Hunter region and contradicts the NSW Clean Air Strategy 2021-30**, which promises to deliver "Clean Energy for Clean Air" by supporting "private sector investment in new clean energy generation, under the NSW Electricity Infrastructure Roadmap, to replace ageing fossil fuel-powered generators as they retire in coming decades."²¹

Air quality in the Hunter is already worse than the national average after decades of coal mining and power generation in the region.²² If approved, the Kurri Kurri Power Station will greatly disadvantage local families, who will continue to face more particulate matter, carbon monoxide, nitrogen oxides, sulphur oxides, hydrocarbons and other volatile organic compounds in the project's 2 years of construction and 30 years of operation.²³

Snowy Hydro claims its proposal complies with "NSW Government requirements for air pollutant concentrations in the exhaust gases". But it measures its impacts against the lower air quality standards that currently apply to "Electricity Generation" in NSW: standards designed to encompass heavy polluters like coal-fired power plants. These low standards enabled five

¹⁸ Australian Energy Council (2020), '[Federal Intervention Risks Private Investment](#)'

¹⁹ Nasdaq (2021), '[Australia's natural gas-fired power output slumps to 16-year low](#)'.

²⁰ ABC News (2021), '[Government accused of pressuring experts who questioned its gas-fired recovery plan](#)'.

²¹ NSW Department of Planning, Industry and Environment (2021), '[Draft Clean Air Strategy 2021-30](#)'.

²² NSW Government (2020), '[NSW annual air quality statement 2020: focus areas](#)'.

²³ Snowy Hydro (2021), '[Hunter Power Project Environmental Impact Statement](#)'.

coal-fuelled plants that were found to be responsible for \$600 million in annual health costs for the Hunter region in 2015.²⁴

As the coal industry slowly winds down, we have an opportunity to improve air quality — and consequently health outcomes — for families in the Hunter region by aiming not for the “Electricity Generation” limits, but for better quality air. Table 1 shows how **Kurri Kurri’s proposed levels of air pollution far exceed those allowed by national standards for ambient air.**

Pollutant	Kurri-Kurri levels (proposed maximum) ^a	Regulatory limits for “Electricity Generation” ^b	Regulatory limits for ambient air ^c	Risks of pollutant ^d
NOx	25 ppm - gas	34 ppm - gas	0.12 ppm	Aggravates asthma and respiratory complications. Increases risk of respiratory infections and symptoms leading to hospitalisation and death. Also contributes to the creation of smog.
	42 ppm - diesel	44 ppm - diesel		
CO	10 ppm - gas	None specified	9.0 ppm (This is expressed as an 8hr average; the Kurri-Kurri estimate is a 1hr average)	Can affect function of organs such as heart and brain. Long-term exposures can cause physical and neurological disorders such as confusion, sleep disturbances, emotional distress, recurrent infections, abdominal pain and diarrhea. Studies have shown that for every increase of 1 ppm of CO, heart failure hospitalisations or mortality rate increase by 3.25%.
	50 ppm - diesel			
PM10	5 mg/m ³ - gas	50 mg/m ³ (total particles)	50 µg/m ³ = 0.05 mg/m³	Can affect the heart and lungs, worsen asthma, reduce lung function in the long term, and increase the risk of heart attacks and arrhythmias, hospitalisation and death.
	10 mg/m ³ - diesel			

Table 1: Proposed air pollution from Kurri Kurri vs state and national standards

^a Snowy Hydro (2021) [Hunter Power Project Environmental Impact Statement](#), Table 15.1: Proposal – Air Emissions Limits ^b NSW Legislation, [Protection of the Environment Operations \(Clean Air\) Regulation 2010](#) ^c Australian Government (2021), [National Environment Protection \(Ambient Air Quality\) Measure](#), Table 1: Standards for Pollutants. ^d NSW Health (2020), [‘Particulate Matter \(PM10 and PM2.5\)’](#) and Environmental Science and Pollution Research (2016), [‘The assessment of health impacts and external costs of natural gas-fired power plant of Qom’](#).

²⁴ Climate and Health Alliance (2015), [Coal and Health in the Hunter](#).

In addition to the pollutants listed above, Snowy Hydro expects the proposed station to add to already high local levels of SO₂ and PM_{2.5} pollutants.²⁵ PM_{2.5} can get into the bloodstream and has been linked with reduced lung function, asthma and heart disease. Local PM_{2.5} levels are expected to rise 0.34% to reach an annual average of 8.69-8.71 µg/m³ with the new station, overshooting the national limit of 8 µg/m³. Local SO₂ levels are expected to rise 0.11% to reach 183.5 µg/m³ with the new station, increasing risk of respiratory problems, asthma, and symptoms like wheezing and dyspnea.

Worryingly, according to Snowy Hydro's Environmental Impact Statement, the above figures do not include start-up and shutdown periods, which must also be considered for two reasons. Firstly, they are likely to occur relatively frequently as Kurri Kurri proposes to only operate during peak electricity demand, and secondly, gas power stations emit more NO_x when they are starting up. A 2016 Californian study found gas power stations to emit anywhere between three and seven times as much NO_x during start-up than during one hour of full-load operation.²⁶

On behalf of our 14,000 national members, Australian Parents for Climate Action urges the DPIE to consider the health impacts of air pollution from yet another fossil fuel power station in the Hunter region. We are particularly concerned about potential health impacts on children, who medical professionals say face greater risks from air pollution.²⁷ Almost two-thirds of local residents in Kurri Kurri and Cessnock are families with children, and the DPIE must ensure the health and wellbeing of this vulnerable group.²⁸

Conclusion

Australian Parents for Climate Action expects the Department to reject the proposed Hunter Power Project given its obligations to NSW constituents and its own policies on emissions, biodiversity, electricity and clean air. We urge the government to directly address the overwhelming public opposition to this project from economists, energy market experts, climate scientists, health professionals, and concerned citizens like the 14,000+ represented by our organisation. At this critical point in history, when we must be lowering emissions immediately and significantly in order to have any chance of maintaining a safe climate, allowing this project to proceed amounts to an act of inter-generational genocide.

²⁵ Snowy Hydro (2021), [Hunter Power Project Air Quality Impact Assessment](#).

²⁶ Aspen Environmental Group and California ISO (2016), [Senate Bill 350 Study Volume IX: Environmental Study](#).

²⁷ American Lung Association (2020), [Children and Air Pollution](#).

²⁸ Snowy Hydro (2021), [Hunter Power Project Environmental Impact Statement](#), Table 19.1.