

9 June 2021

Department of Planning, Industry and Environment
Via Planning Portal

Dear Sir / Madam

NCC submission to the Kurri Kurri Power Station SSI-12590060

The Nature Conservation Council of NSW (NCC) is the peak environment organisation for New South Wales, representing over 160 member groups across the state. Together we are committed to protecting and conserving the wildlife, landscapes and natural resources of NSW.

NCC opposes this development.

Recommendations

Recommendation 1: That the NSW Government reject approval for this development.

Recommendation 2: That if the NSW Government decides to approve the development, the proponent is required to purchase offsets all scope one and two greenhouse gas emissions, including upstream emission such as fugitive gas emissions.

Recommendation 3: That if the NSW Government decides to approve the development, the approval is limited end in 2035 to align with IEA net zero roadmap.

Recommendation 4: That if the NSW Government decides to approve the development, a condition is imposed that requires the power station to use at least 5 percent renewable hydrogen until 2030, and 100 percent renewable hydrogen after 2030.

Recommendation 5: That if the NSW Government decides to approve the development, a condition is imposed that requires the bidding of generation into the National Energy Market (NEM) to be done at arms length from the rest of the Snowy Hydro portfolio, to avoid anti-competitive behaviour.

Primary concerns regarding the proposed gas power station

This project will contribute to unacceptable climate impacts on people and nature, will have negative impacts on the energy market, and is inconsistent with NSW energy market policy.

Climate Change

Australia is a signatory to the Paris Climate Agreement, which commits us to limit global heating to below two degrees and make efforts to limit warming to below 1.5 degrees C.

NSW also has a net-zero by 2050 policy. Building new fossil-fuelled power stations is incompatible with these goals.

The International Energy Agency's Net Zero Roadmap details the actions that the energy sector must take to be consistent with the Paris agreement goals.¹ This includes:

- OECD countries such as Australia achieving net-zero electricity generation by 2035, and
- No investment in new fossil fuel supply.

The proponent commits in its EIS that: "Gas would be supplied to the Proposal from Australia's existing gas fields that feed Sydney and Newcastle via the existing NSW gas transmission system." However, there is a risk that the Kurri Kurri power station would support the establishment of a new gas field at Narrabri and pipeline from the Hunter. Therefore, there is a risk that by approving this project, the NSW government would enable a much larger source of greenhouse emissions, directly contravening the IEA roadmap and NSW policy.

The power station is proposed to operate for 30 years, from 2023 to 2053, well beyond the 2035 net-zero deadline provided by the IEA Roadmap and also beyond any reasonable interpretation of the NSW 2050 net-zero commitment.

This proposal would be responsible for 14.8 million tonnes of greenhouse gas emissions over its lifetime, a contribution that would unjustifiably worsen our already slim chances of avoiding dangerous climate change.

Energy Market Need

The primary aim of this proposal, stated by the proponent, is to fill the gap in dispatchable capacity in the national electricity market, following the closure of Liddell power station, as stated by the Australian Energy Market Operator (AEMO).

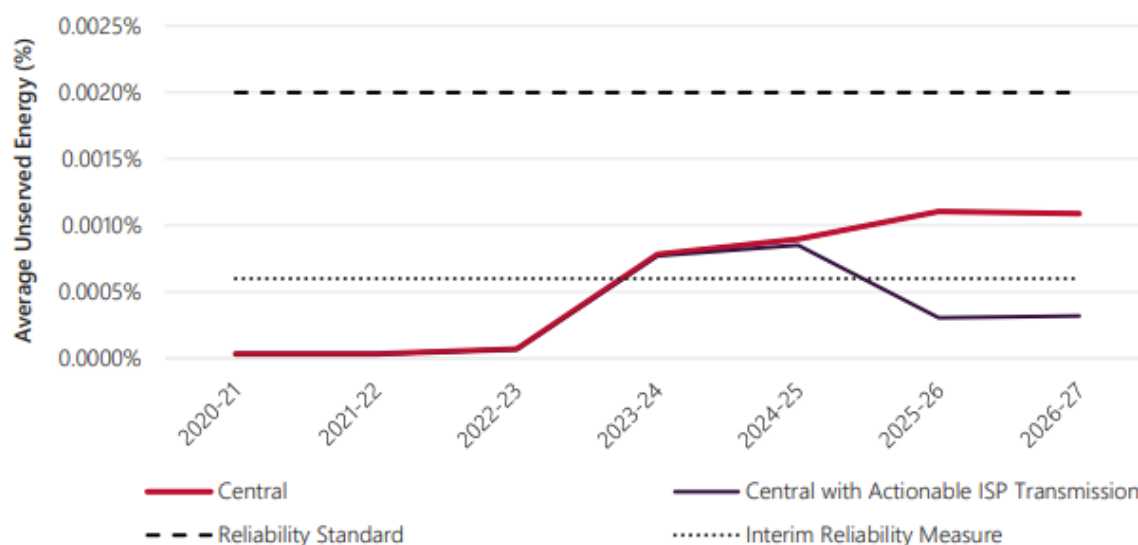
However this gap has already been filled by other projects.

In the 2020 Energy Statement of Opportunities (ESOO), AEMO found that the Reliability Standard will be met in all years out to 2028, as shown in ESOO Figure 65 below.² Thus there is no need for additional gas generation.

¹ International Energy Agency, 2021, "Net Zero by 2050: A Roadmap for the Global Energy Sector",

² Australian Energy Market Operator, Electricity Statement of Opportunities 2020

Figure 65 Impact of actionable ISP transmission augmentations, New South Wales



With Humelink and Snowy 2.0 included in the modelling (thin dark blue line), even the Interim Reliability Measure (IRM) is met in all years except 2023-24 and 2024-25.

AEMO identified the additional capacity required to meet the IRM to be 154 MW in 2023-24 and 305 MW in 2024-25.

This capacity is already met by dispatchable generation projects announced since the ESOO modelling was conducted, including:

- 170 MW under the NSW emerging energy program
- Energy Australia's 300 MW Tallawarra B power station
- Shell Energy and Edify Energy's 100 MW / 200 MWh battery at Darlington Point

These three projects alone, which are all scheduled to come online before the end of 2023, more than meet the gap to achieve the Interim Reliability Measure. The proposed Kurri Kurri gas power station is not needed.

In the longer term, energy market modelling shows that NSW can shift to 100 per cent renewable electricity with no need for additional gas capacity while retaining affordable reliable electricity supply.³

Electricity Prices

The proposed Kurri Kurri gas power station, owned and operated by Snowy Hydro, will further concentrate the firming electricity market in NSW.

Firming generation is required when electricity demand rises above the level that baseload generators and variable renewable generators can supply, or rises at a rate that is faster than the ramp-rate of those generators. Concentrated ownership of this firming generation potentially drives up wholesale prices and crowds out competitors.

³ Reputex, Cost and reliability analysis of a Paris-compliant energy transition in NSW, 2020. Available at: <https://www.nature.org.au/media-releases/2021/03/power-prices-will-be-lower-if-nsw-shoots-for-100-clean-energy-grid-by-2030-report-shows/>

The Australian Competition and Consumer Commission (ACCC) raised concerns about such anti-competitive behaviour in the wholesale electricity market in its 2017-18 inquiry.⁴

"The ACCC has found that elevated prices have generally been driven by high and entrenched levels of concentration in the market."

The ACCC recommended that the Queensland Government divide its generation assets into three separate companies to reduce market concentration.

Snowy Hydro already controls a dominant fraction of the firming generation in NSW. Once Snowy 2.0 is complete, it will hold an even greater concentration of the market, with 63 percent of capacity.⁵

During Senate Estimates questioning by Senator Jenny McAllister on 25 May 2021, Snowy Hydro's chief operating officer Roger Whitby revealed that Snowy Hydro opted to keep its Colongra gas power station switched off during recent price spikes, bidding its energy generation into the market at \$15,000 per megawatt-hour⁶. The short-run marginal cost of open-cycle gas power stations is around \$150 per megawatt-hour. This inflated-price bidding strategy enables Snowy Hydro to maximise the price it receives for generating electricity at its other assets, such as its 1800 MW Tumut 3 power station.

Already, it is likely that Snowy Hydro is able to use its market power to drive higher than efficient wholesale market prices. The approval of the Kurri Kurri gas power station would further harm the competitive operation of the National Electricity Market in NSW, with consequences for electricity prices and consumers.

This project would also crowd-out other investors in the firming market in NSW, undermining the NSW government policy of encouraging 2 GW of new dispatchable generation into the state through the NSW Energy Infrastructure Roadmap.

If you require further information or clarification, please contact Dr Brad Smith, Campaigns Director, available via 02 9516 4888 or bsmith@nature.org.au.

Yours sincerely,



Chris Gambian
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Nature Conservation Council of NSW

⁴ ACCC, Restoring electricity affordability & Australia's competitive advantage, 2018, available at <https://www.accc.gov.au/publications/restoring-electricity-affordability-australias-competitive-advantage>

⁵ Leitch, David, Snowy Hydro to use government subsidy for market dominance, 2021, available at: <https://reneweconomy.com.au/its-a-disgrace-snowy-hydro-to-use-government-subsidy-for-market-dominance/>

⁶ Environment and Communications Committee, Senate Estimates Transcript for 25 May 2021. Available at: <https://bit.ly/3g3qbE7>