

Submission on the Hunter Power Project (Kurri Kurri Power Station)

<u>Names</u>: Professor Michael Abramson, Associate Professor Caroline Lodge, Associate Professor Fay Johnston, Professor Graeme Zosky, and Dr Annabelle Workman on behalf of the Centre for Air pollution, energy and health Research (CAR)

Address: 431 Glebe Point Road, Glebe, NSW, 2037.

8 June 2021

Application Name: Hunter Power Project (Kurri Kurri Power Station)

Application Number: SSI-12590060

Thank you for the opportunity to provide a submission on development application of the Hunter Power Project (Kurri Kurri Power Station).

Summary statement

We **strongly object** to the development of the Hunter Power Station (Kurri Kurri Power Station) based on health grounds.

Proceeding with the development of the Kurri Kurri Power Station will create **direct and indirect short-, medium- and long-term human health impacts** that are disproportionate to the benefits the power station purports to offer.

Reasons for objecting to the proposal

1. Contribution of anthropogenic emissions to air pollution: There is no safe level of air pollution

Numerous pollutants emitted from power stations are known to directly cause negative health impacts. Specifically, exposure to particulate matter ($PM_{2.5}$ and PM_{10}), nitrogen dioxide (NO_2), ozone (O_3) and sulphur dioxide (SO_2) are associated with a range of human health effects, including respiratory diseases, heart conditions, neurological conditions, and diabetes (Landrigan et al 2018). Exposure to these pollutants can lead to death in vulnerable populations.

The air quality assessment completed as part of the development application¹ acknowledges that operation of the power station will lead to increases of ambient concentrations of air pollutants. The latest scientific evidence concludes that **adverse health effects due to exposure to pollutants**, such as particulate matter, occur at levels well below existing

¹ Pickett, M. (2021). *Air Quality Impact Assessment*. Accessed on 4 June 2021. Available from https://www.planningportal.nsw.gov.au/major-projects/project/40951

concentrations outlined in Australian standards (Hanigan et al 2019). Accordingly, proceeding with the Kurri Kurri Power Station will result in adverse health effects for staff and the local community.

2. Contribution of anthropogenic emissions to climate change

Numerous pollutants emitted from fossil fuel-powered energy stations are known to indirectly cause negative health impacts through their contribution to climate change (Smith et al 2014). At a time when natural hazards are already contributing emissions to climate change, it is unethical for governments to willingly contribute further anthropogenic emissions through the development of non-renewable energy sources. Doing so undoubtedly contributes to negative health impacts for current and future generations.

Declaration of reportable political donations

We confirm that none of the authors listed on this submission have made any political donations in the previous two years.

About the Centre for Air pollution, energy and health Research (CAR)

<u>CAR</u> is a Centre of Research Excellence funded by the National Health and Medical Research Council. The centre brings together more than 30 researchers at the forefront of their fields, based in seven of Australia's leading universities.

CAR is the only group of its kind nationally to bring together researchers focusing on health impacts of air pollution, and new versus traditional forms of energy. The centre supports teams of researchers in the fields of epidemiology, exposure assessment, toxicology, chemistry, biostatistics and clinical respiratory medicine to pursue collaborative projects and to develop their capacity. Our centre's vision for a healthier community is the driving force behind our research.

References

- Hanigan, I.C., Rolfe, M.I., Knibbs, L.D., Salimi, F., Cowie, C.T. et al. (2019). All-cause mortality and long-term exposure to low level air pollution in the '45 and up study' cohort, Sydney, Australia, 2006-2015. *Environ Int.* 126: 762-770.
 DOI: 10.1016/j.envint.2019.02.044
- Landrigan, PJ., Fuller, R., Acosta, N.J.R., Adeyi, O. Arnold, R. et al. (2018). The Lancet Commission on pollution and health. *Lancet*. 3;391(10119): 462-512. DOI: 10.1016/S0140-6736(17)32345-0
- Smith, K., Woodward, A., Campbell-Lendrum, D., Chadee, D., Honda, Y. et al. (2014). Human health: impacts, adaptation, and co-benefits. In *Climate Change 2014: impacts, adaptation, and vulnerability. Part A: global and sectoral spects. Contribution of Working Group II to the fifth assessment report of the Intergovernmental Panel on Climate Change.* Cambridge, UK: Cambridge University Press, pp.709-754.

For more information

This submission has been produced by the Centre for Air pollution, energy and health Research (CAR).



For more information about CAR and our work on the health impacts of energy sources, as well as the health impacts of air pollution, contact us at <u>car@sydney.edu.au</u> or visit our website: <u>www.car-cre.org.au</u>