



Australian Government
Australian Renewable
Energy Agency

ARENA

23 October 2024

Dr Ashley Clements
Inquiry Secretary
House Select Committee on Nuclear Energy
Department of the House of Representatives
PO Box 6021
Parliament House, Canberra ACT 2600

By email only

Dear Dr Clements,

Invitation to provide a written submission: Inquiry into the consideration of nuclear power generation in Australia

Thank you for the invitation for the Australian Renewable Energy Agency (ARENA) to appear before the House Select Committee on Nuclear Energy (the Committee). As confirmed in email correspondence dated 18 October, unfortunately ARENA is not available to appear as a witness. Instead, and with your agreement, we provide the Committee with the below written submission.

About ARENA

ARENA was established by the Australian Government on 1 July 2012 by way of the *Australian Renewable Energy Act 2011* (Cth) (the ARENA Act). The main object of the ARENA Act is to improve the competitiveness of renewable energy technologies; increase the supply of renewable energy in Australia; and to facilitate the achievement of Australia's greenhouse gas emissions reduction targets.

ARENA supports the global transition to net zero emissions by accelerating the pace of pre-commercial innovation, to the benefit of Australian consumers, businesses and workers. We provide financial assistance and share knowledge with businesses, industry and communities, to accelerate renewable energy innovation that benefits all Australians and facilitates the achievement of Australia's greenhouse gas emissions targets.

Nuclear energy in Australia

Nuclear-powered electricity production is currently prohibited in Australia under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) and the *Australian Radiation Protection and Nuclear Safety Act 1998* (Cth). Additionally, ARENA understands that several states and territories also have legislation that strictly regulates, controls or prohibits nuclear energy.



ARENA has not undertaken analysis on nuclear energy but notes the recent 2023-24 GenCost Report from the CSIRO and the Australian Energy Market Operator for the first time compared large-scale nuclear power with other options in Australia. The report found that 'renewables - including costs associated with additional storage and transmission - remain the lowest cost, new build technology' and that 'nuclear power was more expensive than renewables and would take at least 15 years to develop, including construction'.

ARENA's mandate

As nuclear energy is not considered a renewable energy technology, supporting nuclear power is not within ARENA's statutory mandate. Aside from the current prohibitions on nuclear energy under Commonwealth and jurisdictional legislation, ARENA is unable to fund any activities relating to nuclear energy under the ARENA Act. Nuclear energy does not align with ARENA's remit for innovative, pre-commercial renewable technology or our objectives to improve the competitiveness and supply of renewable energy to the benefit of Australian consumers, businesses and workers.

ARENA's work over the past 12 years gives us confidence that Australia can successfully transition its energy systems to zero or low carbon alternatives in an economically and technically feasible way. In particular, the combination of solar, wind, batteries and other energy storage technologies, transmission lines, and advanced ways of managing energy flows are technically proven and economically competitive. Collectively these technologies represent our best opportunity of achieving low emissions and reliable energy at a reasonable cost.

We thank you for the opportunity to make this submission.

Yours faithfully,

Darren Miller
Chief Executive Officer

