

November 13, 2024

House Select Committee on Nuclear Energy Parliament House Canberra, ACT 2600

Subject: Strengthening Australia's National Security and Energy Independence

through Nuclear Energy

Dear Committee Members,

As Co-Chairs of the <u>Nuclear Energy and National Security Coalition (NENSC)</u>, we represent a group of experts dedicated to promoting the essential role of nuclear energy in safeguarding national security. We respectfully submit that nuclear energy development in Australia offers unique and strategic benefits that are vital to both national and shared security interests, especially amid rising global geopolitical tensions and growing climate-related challenges. Nuclear power offers the following advantages:

1. Enhancing Energy Security and Grid Reliability

Nuclear energy provides stable, 24/7/365 power, which would ensure the security of Australia's grid even as it incorporates more variable renewable energy sources. This stable baseload power is critical for mitigating blackouts and maintaining the resilience of national infrastructure. Reliable nuclear power thus secures continuous energy supply for essential services and strengthens Australia's autonomy in energy generation.

2. Resilience to Natural and Adversarial Threats.

In general, nuclear power plants are among the most robust and resilient elements of a nation's critical infrastructure, offering a level of protection against natural and adversarial threats that far exceeds most other elements of an electrical grid. Nuclear plants have up to two years' worth of fuel on site, which provides valuable fuel availability and increases the resilience of our electrical grid by eliminating the supply vulnerabilities that face other sources of energy. Unlike renewables, which are susceptible to weather fluctuations, nuclear plants can continue generating power under extreme conditions. This robustness would allow Australia to maintain a secure and uninterrupted power supply, protecting critical infrastructure during extreme natural or climate-related events.

3. Supporting Energy Independence with Domestic Uranium.

Australia's uranium resources could enable energy independence by reducing reliance on imported fuels. Nuclear fuel, a small cost component in nuclear electricity generation, can be produced and managed domestically. With secure local uranium resources, nuclear energy would help Australia fend against international supply shocks and energy-related geopolitical pressures.

4. Climate Security as an Integral Component of National Security.

Nuclear energy's low-carbon profile complements renewable energy in reducing greenhouse gas emission, contributing to climate security goals critical to national stability. By supporting emissions targets and enhancing resilience to climate impacts, nuclear energy aligns with Australia's environmental security interests, helping mitigate risks from resource scarcity and natural disasters.

5. Economic Stability and High-Skilled Job Creation.

Developing nuclear energy offers considerable economic benefits, creating a large number of high-paying jobs in construction, engineering, and plant operations. A skilled domestic workforce contributes to economic resilience and supports broader technological cooperation with allies, including the United States. Such economic stability aligns with our shared interests in fostering a secure, prosperous Indo-Pacific region. Furthermore, developing a skilled domestic workforce in the nuclear arena will reinforce the benefits and underwrite the success of the AUKUS initiative.

6. Securing Australia's Energy in a Geopolitically Complex World.

Amid global energy weaponization and political tensions, nuclear energy can insulate Australia from external energy dependencies, reducing vulnerability to coercive energy policies. By securing an independent, resilient energy source, Australia can strengthen its autonomy and ensure a reliable supply for defense, industry, and the public even in times of crisis.

7. Other Benefits of Nuclear Energy.

In addition to the benefits to the shared national security interests described above, nuclear energy ranks at or above all other energy sources in reliability and capacity factor, human health and safety, greenhouse gas emissions, energy source lifetimes and land usage.

In conclusion, nuclear energy would not only be a strategic asset for Australia's national security and economic health but also a significant contributor to climate and energy resilience. We strongly encourage the Committee to consider the multifaceted benefits of nuclear power as a foundation for Australia's future energy security.

Thank you for considering this submission. If we can provide additional information, please contact us at information@nensc.org.

Sincerely,

Admiral Richard W. Mies, USN (Ret.)

Richard & Mich

Daniel B. Poneman

Co-Chairs, Nuclear Energy and National Security Coalition