## Inquiry into nuclear power generation in Australia Submission 14

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The idea of replacing coal-fired power stations with Small Modular Nuclear Reactors to provide stable base load electricity sounds appealing. However even a minimal amount of research reveals that this is not sensible. The deep and detailed work of many dedicated people over many years shows decisively that nuclear power is not a good idea for Australia. 'Not a good idea' means it is an absolutely terrible idea. Here are a few of the important points:

1. High level nuclear waste is an intractable problem. This problem does not arise with other methods of electricity production. Some have claimed that the waste problem is solved or that the waste produced is minimal. These claims are false. A generally accepted guideline is that radioactive waste can be considered safe after 10 half-lives. The half life of plutonium is 24,000 years. Therefore high level radioactive waste from spent fuel rods must be kept safe from people and the environment for 240,000 years.

2. The favourable comparison with Canada is not correct. The supply of nuclear power in Canada is heavily subsidised by the taxpayer. Nuclear energy in Australia would increase electricity prices not bring them down. Having good uranium deposits does not equate with cheap power.

3. The hype about the Small Modular Reactor (SMR) is unfounded. No Small Modular Reactors are currently in use for domestic electricity supply. NuScale abandoned its SMR project in 2023.

4. The concept of imposing nuclear reactors by using federal power to over-ride state laws on unconsulted communities using public funds is totally undemocratic. It is completely unacceptable.

5. There is an inextricable link between nuclear power and nuclear weapons. Aboriginal Australians in particular have not forgotten Maralinga.

6. Dramatic cost increases and long time delays are standard for nuclear reactor construction.

7. Renewable energy is not perfect, but it is infinitely preferable to the nuclear option. Australia has great renewable energy opportunities, which are being successfully pursued.

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