



Committee Secretariat  
PO Box 6021  
Parliament House  
CANBERRA  
Canberra ACT 2600

SCHOOL OF ELECTRICAL & ELECTRONIC  
ENGINEERING

PROF DEREK ABBOTT

THE UNIVERSITY OF ADELAIDE, SA 5005  
AUSTRALIA

9th August 2019

Dear Secretariat

**Re: Inquiry into the prerequisites for nuclear energy in Australia**

1. Nuclear power is not appropriate in Australia as our national electricity market is only about \$10 billion per annum. This is tiny compared to industrialised nations that have nuclear power.
2. The cost of even one nuclear reactor together with supporting infrastructure, waste disposal etc. is many times that value. Thus, there is no business case for nuclear in Australia.
3. From an engineering viewpoint the modern grid in fact needs energy sources that can rapidly respond to changing demand. Nuclear power stations are best at providing a constant rather than changing output. Thus, a nuclear program would be a poor investment in a technology that will be largely redundant in the modern grid.
4. There are numerous other reasons why nuclear is unwise for Australia. If requested I am happy to present at any hearing the facts as to why nuclear is an unsound investment.
5. Whilst I understand that published material is not required for submissions, I would like to point out I have a number of key publications in the area that support the above statements. In this spirit, the following article plus supporting references may be regarded as useful background material:  
[http://www.eleceng.adelaide.edu.au/personal/dabbott/publications/AQR\\_abbott2016.pdf](http://www.eleceng.adelaide.edu.au/personal/dabbott/publications/AQR_abbott2016.pdf)

Yours sincerely,

[Redacted signature]

Prof Derek Abbott  
***Fellow of the Institute of Electrical & Electronic Engineers (IEEE), USA***  
***Fellow of the Institute of Physics (IoP), UK***

[Redacted contact information]