



Submission to the Inquiry into nuclear power generation in Australia.

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Submission in the federal Select Committee on Nuclear Energy

Dear Committee Secretariat

The Justice and Peace Office is an agency of the Catholic Archdiocese of Sydney, charged with promoting awareness, understanding and action in relation to justice, peace, ecology, and development as guided by Catholic Social Teaching. The source of energy used in Australia is an issue of ecological justice for future generations, coal-impacted communities and the earth itself, hence our engagement with the inquiry into nuclear energy.

I wanted to take the opportunity of the Inquiry into nuclear power generation in Australia to share a little about my experience and interest regarding this issue. I understand the importance of community members speaking out at a time like this and appreciate your time hearing me out. That begins with a brief observation about the maturation of both the renewable energy and the proposed nuclear energy roll-out.

As a former journalist I reported extensively on the associated issue of nuclear storage and the-then nuclear fuel leasing proposal supported by the previous Howard government.

I raise this associated issue for two reasons. Firstly, it covers many of the issues associated with the proposal to build seven nuclear reactors. They include; corruption, cost, un-insurability and location. Secondly, because that period makes clear just how long the time frames are for realising this power source, and how speculative the technology is and remains.

True Cost

I want to begin with the hopes of the Opposition leader, Peter Dutton when he said: "...we could be like Ontario, where they've got 60 or 70 per cent nuclear in the mix, and they're paying about a quarter of the price for electricity that we are here in Australia."

Unfortunately, that is not the truth. With thanks to Tristan Edis¹ in fact Australians pay far less for our energy than the people of Ontario when we factor in all the hidden charges imposed by a chaotic and expensive Canadian nuclear power program. Edis has examined the Canadian power bills

¹ Renew Economy (October 30, 2024) **Ontario's huge nuclear debt and other things Dutton doesn't understand about cost of electricity**. Accessed online 6 November 2024
<https://reneweconomy.com.au/ontarios-huge-nuclear-debt-and-other-things-dutton-doesnt-understand-about-cost-of-electricity/>

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and found, rather than paying four times more than the 14.3 cents Ontario households pay for electricity, we actually pay anywhere between 1% to 19% less. Edis also notes Ontario businesses and households were stuck with paying back CAD\$38.1 billion in debt (over \$70 billion in Australian current day dollars) for more than 35 years after their public utility committed its last nuclear reactor to construction in 1981.

This also highlights the importance and difficulty of getting accurate information in an industry that not only provides energy but is also used as a critical ingredient in weapon production. For instance, in 2006 Adrian Rollins and myself wrote an article for the AFR detailing a conflict of interest that existed for Professor Gittus,

...the author of a report that found nuclear energy was cost-competitive with coal and gas has been accused of a conflict of interest, after revelations he is a member of a syndicate that insures the Lucas Heights nuclear reactor. A Senate estimates hearing yesterday heard that the Australian Nuclear Science and Technology Organisation, which commissioned British nuclear expert John Gittus to prepare the report, insured the Lucas Heights nuclear reactor with Lloyd's of London.

The Australian Financial Review can reveal that Professor Gittus's Who's Who entry says he helps run Lloyd's of London Insurance Syndicate 1176, the biggest commercial insurer of nuclear power stations and other facilities in the world. In his report, a synopsis of which has been released by ANSTO, Professor Gittus said the cost of generating electricity from a common type of nuclear reactor was cheaper than coal or gas stations.²

In another AFR story in 2006 the same issue of reliable research and costings existed.³

Just trying to discover the cost of energy generated by a nuclear power station in order to compare it with coal, gas and renewables is "an unanswerable question because there are too many ambiguities", according to the head of the University of NSW's Centre for Energy and Environmental Markets, Hugh Outhred. "For example, the fuel going into US nuclear power stations is coming from their nuclear weapons program, which is why it is so highly enriched and may contain small amounts of plutonium," he says.

The UK House of Commons Environmental Audit Committee has put the price of nuclear power at between \$100 to \$150 per megawatt hour, compared with natural gas at \$35 to \$45 per MWh (2004 white paper), and clean coal (geosequestration, where carbon is captured or stored, usually underground) at \$104 per MWh, according to the International Energy Agency. The bottom line for developing a nuclear industry that is not economically viable is that taxpayers will have to subsidise it - either directly or through higher prices. (Macken AFR 2006)

² Adrian Rollins and Julie Macken (1 June 2006) **Atomic power author in conflict. The Australian Financial Review. Accessed online 6 November 2024 <https://www.afr.com/markets/commodities/atomic-power-author-in-conflict-20060601-jeksz>**

³ **Nuclear at a disadvantage. Julie Macken.** (1 June 2006) The Australian Financial Review.



Reliable research is critical to this debate today.

Meanwhile in 2023, renewables saw record additions of 507 gigawatts, while nuclear power experienced a net loss of capacity. Solar and wind now produce over three times more electricity than nuclear worldwide. The Australian Energy Market Operator forecasts that renewables could meet 96% of Australia's electricity needs by 2040, with nuclear adding limited, if any, value. The CSIRO's latest report shows that nuclear options, including large-scale and small modular reactors, would cost between \$155 and \$641 per megawatt-hour, significantly higher than wind and solar with storage, which come in at \$100–143 per MWh. Experts warn that the required infrastructure would demand billions in subsidies, increasing both taxes and household energy bills.

Risks and Opportunities

The war in Ukraine highlights the most recent risks presented by nuclear power; that of an aggressor weaponizing a nuclear power plant to terrorise a civilian population. These risks simply do not exist with any of the sources of renewable energy. Beyond routine safety protocols, there is a heightened risk of catastrophic failures, as seen with Japan's Fukushima disaster in 2011, which displaced nearly 200,000 residents and incurred billions in continuing costs. Locally, Greenpeace demonstrated the risk to the small medical reactor at Lucas Heights when activists flew into, danced into and jogged into the plant dressed as bananas among other things.⁴ Something that would be hard to miss one would have thought.

The risks are enormous and certainly no laughing matter. It is unclear what opportunities are presented by nuclear energy in Australia as – if they were ever built – it would not be for another 20 years. By 2050 the world must have made the transition to a no-carbon economy or will already be dealing with catastrophic impacts.

Nuclear power is a high cost and long consequence energy option. In a nation with plentiful renewable energy resources promoting nuclear is an expensive delay tactic that seeks to prolong fossil fuels. We can't afford to be investing time or money in the wrong energy option in this critical decade to take action.

We commend this submission to your inquiry. Dr. Julie Macken, Justice & Peace Facilitator. Sydney Archdiocese, on behalf of the Justice & Peace Office Sydney Archdiocese.

Dr. Julie Macken

⁴ <https://www.abc.net.au/science/articles/2001/12/18/443080.htm>



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