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Submission to Environment and Other Legislation Amendment (Removing Nuclear Energy Prohibitions) Bill 2022

Dear Sir / Madam,

My name is Logan Smith, I hold an RMIT Bachelor of Civil and Infrastructure Engineering and a UNSW Masters in Engineering Science – Nuclear. I am currently working in the construction industry but I represent myself, and my podcast in this submission.

When I started my podcast, I opened a twitter account to advertise it. I coined the #Repeal140A hashtag on that platform and this bill embodies that sentiment.

Having followed this topic in Australian policy since 2015, I am familiar with the SANFCRC, the 2019 Federal Enquiry, and the two state (NSW and Vic) enquiries. The Announcement of AUKUS, although officially restricted to nuclear in terms of submarines, has generated much speculation of civil nuclear in its wake.

As I see it, the technical requirement for this technology has been well documented and justified, in the last seven years alone. However, having studied the memoir of the late Keith Alder (Director of the AAEC, the predecessor to ANSTO), 'Australia's Uranium Opportunities' (The book was self-published and is difficult to find, though I have made it available on my podcast as an audiobook – www.goingfission.podbean.com) I can see that tragically, Australia has reliably squandered unquantifiable money, talent and opportunity in the field since the 1950's. Recently, this has taken the form of initiating government enquiries and then never acting on them. Last century it was encouraging the AAEC to engage with the global nuclear industry to garner major projects and withdrawing support at the crucial moment.

Australia has repeatedly demonstrated her technical capability when engaging with this technology. We are a developed nation and we have produced competent technicians and professionals in near-every field. In the last 70 years is the persistent failure of government leadership has smothered the nation's ability to develop a civil nuclear industry. Indeed, the only reason for the AUKUS agreement appears to be due to the deteriorating political environment in the pacific region. Why do we recognise this situation and act whilst continuing to ignore the deteriorating state of our national energy generation capability?

Sadly, this Bill is likely stillborn. Despite the tabled report of the federal enquiry recommending that clause 140A should be removed (or at least, modified to allow construction of modern nuclear power reactors), if the Coalition wishes to repeal 140A, there is a long road of campaigning ahead, now made harder having being relegated back to opposition party. I am confident there are Labor members supportive of nuclear power, though it appears they are not speaking on this issue and are towing the party line.

There is enough real-world evidence to suggest that it is unlikely renewables alone sufficient to support a developed nation such as Australia. Germany is probably the best immediate case study. Their 'Energiewende' policy has closed all but three of their domestic reactors,

applied pressure to their European neighbours to do the same, forcing everyone to rely on Russian gas, and severely crippled their ability to oppose the invasion of Ukraine. This happened at around 50% renewable penetration into German electricity production.

Australia is currently at about 35% renewable. Our electricity prices are some of the highest in the world. Cheap, reliable energy promotes a nations prosperity, and is particularly important for industry. Much of Australia's industry has already been pushed off-shore. AEMO suspended the NEM for two weeks in June 2022. What else will happen as we continue to force intermittent renewables onto the grid, without properly assessing how to address their shortfalls?

The Labor party currently touts renewables as being the cheapest electricity and nuclear the most expensive. Such an assumption is drawn from an inadequately simplistic interpretation of 'Levelized Cost of Electricity' (LCoE) metrics and does not hold up to basic scrutiny. Intermittency, or 'when the wind doesn't blow and the sun doesn't shine' is not a political talking point, it is a technical limitation that is not given the thought it deserves. Such hubris, if not appropriately challenged, will stifle any progress for Australian Nuclear until at least the next election.

Progress isn't going to come solely from a Bill, this issue will require courage and leadership from the Coalition and sound technical action from Labor.

Donald Horne, Author of the 'Lucky Country' (1964) had this to say in the final chapter:

'Australia is a lucky country run mainly by second rate people who share its luck. It lives on other people's ideas, and, although its ordinary people are adaptable, most of its leaders (in all fields) so lack curiosity about the events that surround them that they are often taken by surprise.'

It's been nearly 60 years since this was published. We've allowed nuclear to stagnate for a similar period. I'd like to see this issue move forward.

Sincerely,

Logan Smith