



## Friends of the Earth Adelaide

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### Submission to the Joint Standing Committee on Treaties re “Agreement ... for Cooperation related to Naval Nuclear Propulsion”

This *Agreement* should be rejected for reasons including those outlined below.

#### 1. Because the underlying premises are false or misleading.

##### (a) *Australia's defence and security*

The premises stated in the preamble include:

Recognizing that their common defense and security will be advanced by the exchange of information, including Naval Nuclear Propulsion Information, and the transfer of Material and Equipment for conventionally armed, nuclear-powered submarines, in accordance with this Agreement; and  
Believing that such exchanges and transfers can be undertaken without unreasonable risk to each Party's common defense and security.

These premises are false. In fact, Australia's security will not be advanced and there is an unreasonable risk to Australia's defence and security, as can be seen from the quotes below from eminent military analysts.

Hugh White (emeritus professor of strategic studies at the Australian National University, former deputy-secretary of the Department of Defence) states as follows:

The new plan – to buy a nuclear-powered submarine instead – is worse [than the old plan]. It will make the replacement of the Royal Australian Navy's fleet of Collins-class boats riskier, costlier and slower. It means an even bigger slump in our submarine capability over the next few dangerous decades. And it deepens our commitment to the United States' military confrontation of China, which has little chance of success and carries terrifying risks.<sup>1</sup>

He concludes that it “tied Australia to a deal that undermines our sovereign capabilities, overspends on hardware we can barely be confident of operating, and drags us closer to the front line of a war we may have no interest in fighting.”<sup>2</sup>

Major General Michael G Smith (retired) says:

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<sup>1</sup> Hugh White, "From the submarine to the ridiculous", *The Saturday Paper*, 18 September 2021  
<https://www.thesaturdaypaper.com.au/2021/09/18/the-submarine-the-ridiculous/163188720012499#mtr>

<sup>2</sup> Ibid.

In my view this decision to procure nuclear-powered submarines will prove to be as useless, but even more costly, than was our flawed Singapore strategy before World War II.<sup>3</sup>

Sam Roggeveen (director of the Lowy Institute's International Security Program) is quoted as saying:

It (AUKUS) is a project of vaulting ambition that is out of step with Australian tradition as a middle military power, wildly at odds with our international status and, most importantly, a wasteful expenditure of public money that will make Australia less safe.<sup>4</sup>

*(b) Nuclear non-proliferation*

The preamble also includes the following premises:

Reaffirming their respective obligations under the Treaty on the Non-Proliferation of Nuclear Weapons, done at London, Moscow, and Washington 1 July 1968, and entered into force 5 March 1970; ...

Further recognizing that Australia has announced its intention to negotiate and conclude an Article 14 arrangement with the International Atomic Energy Agency ("IAEA") pursuant to the Australia-IAEA Comprehensive Safeguards Agreement, related to cooperation under this Agreement.

The premises thus stated fail to acknowledge that the 'Article 14' arrangement in question is a self-contradictory attempt to close a dangerous loophole in the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). The NPT only requires the application of safeguards to 'peaceful' nuclear activities. That leaves unstated the question of what to do about 'non-peaceful' nuclear activities, other than nuclear weapons which are banned for non-nuclear-weapon states.

'Article 14' of the Australia- IAEA comprehensive safeguards agreement (INFCIRC/217, 13 December 1974) states:

Australia shall inform the Agency of the activity, making it clear:

That the use of the nuclear material in a non-proscribed military activity will not be in conflict with an undertaking Australia may have given and in respect of which Agency safeguards apply, that the nuclear material will be used only in a peaceful nuclear activity.

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<sup>3</sup> Major General Michael G Smith AO (Ret'd), 'How should Australia defend itself in the 21st century? Silencing the drums and dogs of war', The New Daily, May 26, 2023  
<https://thenewdaily.com.au/news/world/2023/05/26/how-should-australia-defend-itself-in-the-21st-century-silencing-the-drums-and-dogs-of-war/>

<sup>4</sup> Nick Deane, 'Hugh White dismantles the AUKUS project' Pearls and Irritations, Feb 29, 2024  
<https://johnmenadue.com/hugh-white-dismantles-the-aucus-project/>

It is a logical contortion to suggest that nuclear powered naval submarines are “a peaceful activity”.

In a 6 October 2021 letter to President Biden, seven leading US non-proliferation experts explain the problem as follows:

The IAEA is charged by the Treaty on the Nonproliferation of Nuclear Weapons with verifying that nuclear material in non-weapon states is not diverted to nuclear weapons. The IAEA is constrained, however, by Section 14 of its standard safeguard agreement, “Non-Application of Safeguards to Nuclear Material to be Used in [Non-Explosive] Non-Peaceful Activities,” which would allow a country to exempt HEU fuel from normal inspections for decades. This well-known loophole has not yet been tested.<sup>5</sup>

These nuclear non-proliferation experts go on to articulate the following concern:

We ... are concerned that the AUKUS deal to supply Australia with nuclear-powered attack submarines fueled with weapon-grade uranium could have serious negative impacts on the global nuclear nonproliferation regime and thereby on US national security.<sup>6</sup>

They are concerned that countries including Iran, Brazil and South Korea could use the agreement between Australia, the UK and the US as a precedent to support their own interest in acquiring nuclear submarines. The experts express their concern for US national security, but the negative impacts also apply to the national security of Australia.

## 2. Radioactive waste

If Australia goes ahead with its plan to acquire nuclear powered submarines, the resulting spent nuclear fuel and other radioactive waste will continue to be dangerous for tens of thousands of years. It will have to be managed, stored and disposed of, but the countries from which we would purchase these submarines inspire no confidence that this can be safely achieved. In over 60 years of operating nuclear submarines, the US and UK have been unable to dispose of their own spent nuclear fuel.

Besides spent nuclear fuel from Australian AUKUS submarines, there is a danger that Australia could be pressured into storing and disposing of spent nuclear fuel from UK and US submarines. Under the *Agreement*, the status of spent fuel from second hand Virginia class submarines to be purchased from the US is vague, but it is likely that Australia would be expected to accept US spent fuel: i.e. to dispose of both the spent fuel produced while the submarines were owned and operated by the US, as well as that produced while they were owned and operated by Australia. The situation regarding other UK and US submarines is also unclear. Minister for Defence Richard

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<sup>5</sup> Frank von Hippel et al, Letter to President Biden, 6 October 2021  
<https://sgs.princeton.edu/sites/default/files/2021-10/AUKUS-Letter-2021.pdf>

<sup>6</sup> Ibid.

Marles has stated that Australia would not accept radioactive waste from overseas,<sup>7</sup> but this has not been explicitly ruled out in the *Australian Naval Nuclear Power Safety Bill 2023* currently before Parliament. The words of an under-pressure defence minister in 2024 are unlikely to count for much decades hence if Australian legislation and the *Agreement* between Australia, the UK and the US do not prohibit the acceptance of foreign spent nuclear fuel.

It is important to acknowledge Australia's poor history regarding radioactive waste disposal facilities. As former Senator Rex Patrick points out, "Australia has been searching for a site for a National Radioactive Waste Management Facility (NRWMF) site since the 1970s; and after 50 years, it still hasn't found a spot on which to safely establish such a repository."<sup>8</sup> Several attempts have been made, but they have been opposed by the Traditional Custodians, as well as the wider public. The United Nations Declaration on the Rights of Indigenous Peoples states:

States shall take effective measures to ensure that no storage or disposal of hazardous materials shall take place in the lands or territories of indigenous peoples without their free, prior and informed consent.<sup>9</sup>

This principle has not been followed in the search for a National Radioactive Waste Management Facility. Now the Commonwealth Government is seeking to commit Australia to storing and disposing of highly radioactive long-lived spent nuclear fuel from nuclear submarines. In the event that Australia does acquire nuclear submarines, any future disposal site selection process should adhere to this principle. However, it should not be taken for granted that Australia will be able to find willing communities to host a site, especially considering that several State and Territory governments have laws or policies opposing the disposal of nuclear waste in their jurisdictions.<sup>10</sup> The Commonwealth should respect such prohibitions. It should not take the view that it can just ride roughshod over them.

Australia is not alone in this problem. Nearly 80 years since the first atomic bomb test and 70 years since the world's first nuclear power station commenced operation, no country in the world has succeeded in disposing of its civilian or military spent nuclear fuel. Finland is the most advanced in this regard, with construction of a repository nearing completion. Most countries have not even reached the stage of selecting a site.

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<sup>7</sup> Jake Evans & Kathleen Calderwood, 'Defence Minister Richard Marles insists AUKUS milestone won't force Australia to accept foreign nuclear waste', ABC, 9 August 2024  
<https://www.abc.net.au/news/2024-08-09/aucus-radioactive-waste-marles-denies-us-uk-obligation/104184608>

<sup>8</sup> Rex Patrick, 'Nuclear waste. Fifty years of searching, still nowhere to dump it.' *MichaelWest Media*, Dec 15, 2023  
<https://michaelwest.com.au/nuclear-waste-fifty-years-of-searching-still-nowhere-to-dump-it/>

<sup>9</sup> United Nations Declaration on the Rights of Indigenous Peoples, Article 29.2.

<sup>10</sup> Emily Gibson, 'Current prohibitions on nuclear activities in Australia: a quick guide', Parliamentary Library, 30 May 2024  
[https://www.aph.gov.au/About\\_Parliament/Parliamentary\\_departments/Parliamentary\\_Library/pubs/rp/rp2324/Quick\\_Guides/NuclearActivitiesProhibitions](https://www.aph.gov.au/About_Parliament/Parliamentary_departments/Parliamentary_Library/pubs/rp/rp2324/Quick_Guides/NuclearActivitiesProhibitions)

### 3. Health and Safety

Much as the United States Navy claims that its nuclear-powered submarines are safe,<sup>11</sup> the fact is that the longer they operate the more highly radioactive material accumulates in their reactors. Unlike civilian nuclear power plants, which have some of their spent fuel removed during regular outages, US and UK designed submarines, which use highly enriched uranium and do not require refuelling, keep accumulating radioactive material for the life of the submarine. Therefore, even though submarine reactors have a lower power output than standard civilian reactors, after they have been operating for a while they accumulate a substantial inventory of spent fuel.

It is not possible to guarantee that some of that radioactive material will not be released into the environment, but, under the terms of the Agreement, liability is foisted onto Australia. Article IV.E states as follows:

Australia shall indemnify, subject to paragraph F of this Article, the United States and the United Kingdom against any liability, loss, costs, damage or injury (including third-party claims) arising out of, related to, or resulting from Nuclear Risks connected with the design, manufacture, assembly, transfer, or utilization of any Material or Equipment, including Naval Nuclear Propulsion Plants and component parts and spare parts thereof, transferred or to be transferred pursuant to this Article.

So even if the fault lies with the US or the UK, the liability, which could be huge, lies with Australia. No government should accept such a risk.

Emergency planning is necessary to respond to potential accidents. In the case of port visits by foreign nuclear vessels, organisations including the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA), the Department of Defence, and State and Territory authorities each play a role in planning and responding to accidents involving the release of radioactive material.<sup>12</sup> According to the Department of Defence,

1.4 The Australian Government requires contingency arrangements to be in place at all Australian ports visited by NPWs and also requires that there be the capability to undertake radiation monitoring of the port environment. These arrangements are formulated to cover two potential release mechanisms, which are failure or malfunction of radioactive waste control systems within the vessel and an accident involving the reactor plant.<sup>13</sup>

One scenario that is not considered is the case of a nuclear vessel being attacked by a hostile foreign power. As we witness the attacks on the Zaporizhzhia Nuclear Power Plant in Ukraine, we

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<sup>11</sup> Fact Sheet on U.S. Nuclear Powered Warship (NPW) Safety, April 2006  
<https://www.mofa.go.jp/region/n-america/us/security/fact0604.pdf>

<sup>12</sup> Department of Defence, 'Defence Operations Manual (Opsman 1): Visits to Australia by Nuclear-Powered Warships', Edition 11, 2023

<sup>13</sup> Ibid.

are forced to realise that attacks on nuclear facilities are not confined to the realm of fantasy. Inevitably a hostile power (be it China, or Russia, or some other country in future) would perceive Australian nuclear powered submarines operated in alliance with the United States and the United Kingdom as a threat. We cannot rule out the possibility that such a hostile power might one day decide to attack an Australian nuclear powered submarine, or a US or UK nuclear vessel while it is in an Australian port or in waters near the Australian coast.

Even if the probability of a nuclear accident is low, the potential consequences could be catastrophic. The fact that there are grave risks is essentially acknowledged in the high “permissible radiation dose[s]” envisaged under the existing emergency response plans.<sup>14,15</sup> There are already risks involved in accepting visits by foreign nuclear ships. However, there have been no nuclear vessel visits to Adelaide, where Friends of the Earth Adelaide is based, so there has been no need to develop emergency plans for this contingency. We would like to keep it that way. For that reason, we do not want Osborne to be declared a “designated zone” for nuclear submarine construction. The claimed benefits (which are mostly illusory) are not worth the risk.

#### **4. Waste of money and human resources**

The projected cost of AUKUS is extraordinary.

The costs of the submarine component of AUKUS are estimated at \$368bn through to the 2040s; and the total cost also includes \$3bn to be transferred to the USA to help with its current domestic submarine production difficulties (Creighton 2023).<sup>16</sup>

We live in a time of multiple crises: for example, a failing health system, lack of housing, energy system transformation, and degradation of the environment. All of these crises are security issues. The security of ordinary Australians is compromised when they can't get a hospital bed, or find a home to live in, or pay their electricity bill, or enjoy the fruits of a sustainable environment. All these security crises could be greatly ameliorated by the wise use of \$368 billion. On the other hand, nuclear-powered submarines won't even make us safer from attack (refer discussion above), let alone solve any of the real security issues faced by Australians on a daily basis.

Politicians like to claim that the submarine project will create jobs.

A government press release in March 2023 claimed that the jobs in South Australia arising from the AUKUS deal would be fairly evenly divided between 4,000 workers

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<sup>14</sup> ARPANSA, ‘Guide for Radiation Protection in Emergency Exposure Situations – Planning, Preparedness, Response and Transition’, Radiation Protection Series G-3 Part 2, 30 May 2019

<sup>15</sup> David Noonan, 'Labor imposes AUKUS nuclear submarines while failing to inform the affected SA community of the health risks they face in a potential reactor accident', 29 July 2024  
<https://nuclear.foe.org.au/wp-content/uploads/Noonan-Health-Risks-in-an-AUKUS-N-Sub-React-or-Accident-Briefer-29-July-2024.pdf>

<sup>16</sup> Al Rainnie, 2024 ‘AUKUS and Jobs’, *Journal of Australian Political Economy*  
No. 92, pp. 217-23.

employed to design and build the infrastructure at Osborne (Port Adelaide) and a further 4,000 to 5,500 to build the actual submarines. The AMWU sees around 5,000 workers being needed to build, maintain and repair the submarines when the build is scheduled to start in the 2040s. Spread over more than a quarter of a century, this is not hugely impressive.

Furthermore, as John Quiggin (2023) pointed out, at current estimates, this works out at roughly \$18 million per job.<sup>17</sup>

Spending this money on health, housing, renewable energy and the environment would create many more jobs at the same time as addressing the real sources of insecurity for Australians now and in the foreseeable future. Furthermore, it is not just a matter of the money, but also the diversion of skills that unwise spending leads to.

For Port Adelaide/Osborne, the lesson is that it would be wise to treat all claims regarding job growth and related local economic development with a large pinch of salt. South Australia, like the rest of the country, is facing a massive skills shortage. A 2023 report from Jobs and Skills Australia (JSA 2023) argued that Australia would need more than two million workers in the building and engineering trades by 2050 and more than 32,000 more electricians by 2030. A development focussed entirely on producing nuclear submarines to reinforce a growing Cold War is going to suck skilled workers from other vital sectors.<sup>18</sup>

## 5. Conclusion

The proposal for Australia to acquire nuclear powered submarines from the US and the UK, was conceived in secret and presented as a *fait accompli* to the Australian public by then Prime Minister Morrison. After taking a few hours to collect its thoughts, judging that so close to an election it couldn't afford to be seen to be weak on Defence, as a matter of political expediency the then Albanese Opposition accepted the deal, even though it made no sense from a security perspective and represented a massive opportunity cost for every Australian for decades. If Australia proceeds with the deal, it will be Scott Morrison's greatest legacy: a giant millstone bequeathed to the people of Australia.

Despite the fact that the deal has received criticism from both the right and the left, there is no sign that either Labor or the Liberal/National Coalition are interested in winding it back. But maybe these submarines have an escape hatch written into the clauses of the *Memorandum of Understanding* and the *Agreement* itself. Clause 6 of the *Memorandum of Understanding* states:

The Governments affirm that cooperation under the Agreement is to be carried out in such a manner as to not adversely affect the ability of the United States and the United Kingdom to meet their respective military requirements and to not degrade their respective naval nuclear propulsion programs.

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<sup>17</sup> Ibid.

<sup>18</sup> Ibid.

The grounds for making this judgement are not specified, but based on the current rate of submarine construction in the US and the UK, it would not be difficult for those countries to make the case that delivery of submarines to Australia would “degrade their respective naval nuclear propulsion programs”.<sup>19</sup> Article XIII of the *Agreement* gives them the right to terminate the *Agreement* with one year’s written notice, so there is their escape hatch.

We strongly believe that the *Agreement* should not be entered into in the first place. The proposal for Australia to acquire nuclear powered submarines should be rejected on security, safety, nuclear non-proliferation, environmental and economic grounds. Given that both sides of politics have committed themselves to these submarines, it would take some political courage to reverse course. If the government does not have enough political courage to make the right decision now, then it should encourage the US and UK governments to do the arithmetic and quickly come to the conclusion that they can’t build submarines fast enough to supply Australia without degrading their own nuclear propulsion programs. The quicker everyone acknowledges this and exercises their right to terminate the *Agreement*, the less money will be wasted.

Philip White  
For Friends of the Earth Adelaide

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<sup>19</sup> Paul Gregoire, ‘Congress’ Thinktank Flags AUKUS Alternative: US Submarine Base in WA and no Australian Subs’, Sydney Criminal Lawyers, 2 August 2024  
[https://www.sydneycriminallawyers.com.au/blog/congress-thinktank-flags-aukus-alternative-us-s-ubmarine-base-in-wa-and-no-australian-subs/?utm\\_source=newsletter&utm\\_medium=email&utm\\_campaign=week-32](https://www.sydneycriminallawyers.com.au/blog/congress-thinktank-flags-aukus-alternative-us-s-ubmarine-base-in-wa-and-no-australian-subs/?utm_source=newsletter&utm_medium=email&utm_campaign=week-32)