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## At NPT RevCon, US Expert Calls for AUKUS States to Abandon Bomb-Grade Nuclear Submarine Plan

NEW YORK – At the UN's Nuclear Non-Proliferation Treaty (NPT) review conference today, a US nonproliferation expert condemned the US and UK's plan to transfer submarines fueled with nuclear weapons-grade, highly enriched uranium (HEU) to Australia under the so-called AUKUS partnership, as "a profound error made by a small circle of officials ignorant of their countries' longstanding nonproliferation policies to minimize HEU commerce." Australia is a non-nuclear weapons state (NNWS) under the treaty.

According to Prof. Alan J. Kuperman, head of the Nuclear Proliferation Prevention Project at the University of Texas, "For many decades until September 2021, all three AUKUS countries – Australia, United States, and United Kingdom – opposed expansion and advocated minimization of HEU commerce, including as reactor fuel, on grounds that it undermined the NPT goal of preventing the spread of nuclear weapons."

He characterized as "misleading" the AUKUS countries' recent claim that the submarine fuel "would not be in a form that can be directly used in nuclear weapons without further chemical processing." In reality, he said, "HEU in submarine fuel has a form like that in research reactors and pharmaceutical factories, which have been required to convert to LEU" – low-enriched uranium, which is unsuitable for atomic weapons - "precisely because their HEU could be converted quickly and easily to metal for nuclear bombs, in small and undetectable facilities that even terrorists could build and operate."

"Considering that the world has deemed it too dangerous to allow even a few kilograms of HEU in a research reactor or pharmaceutical facility on dry land that can be monitored constantly," he said, "it would be catastrophically irresponsible to allow a NNWS to have tons of HEU for a submarine program that cannot be inspected frequently."

Under the AUKUS precedent, he warned, "other countries could demand the same right to import or produce massive quantities of HEU for nuclear submarines, creating unstoppable paths to nuclear weapons.... The international community could not effectively block [other] NPT signatories from pursuing such HEU submarine programs, by claiming the countries were less trustworthy than Australia, because that would be seen as discriminatory ... [so] the current AUKUS plan inevitably would foster the spread of nuclear weapons."

Kuperman called on the trilateral partnership to announce a change in plans by the August 26 closing of the UN event: "Rather than continue implementation of this ill-informed decision that threatens to vitiate the NPT, all three countries should declare by the end of this review conference that any nuclear submarines transferred or built under AUKUS would use LEU fuel." By switching to LEU submarines, he said, Australia "would set a positive precedent, demonstrating how a country could obtain nuclear naval propulsion without fostering proliferation."

Kuperman's full statement to the 10<sup>th</sup> NPT Review Conference is attached.



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## **AUKUS HEU Submarines Would Undermine the NPT**

Statement to the
Tenth Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons
United Nations, New York

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The NPT's purpose is to inhibit the spread of nuclear weapons, but that vital goal would be undermined by the AUKUS partnership's plan to export tons of weapons-grade, highly enriched uranium (HEU) — enough for hundreds of nuclear bombs — from NPT nuclear-weapon states, the United States and/or United Kingdom, to an NPT non-nuclear-weapon state (NNWS), Australia.

Under this precedent, other countries could demand the same right to import or produce massive quantities of HEU for nuclear submarines, creating unstoppable paths to nuclear weapons. If a country imported HEU submarines, it could convert the fuel into nuclear weapons components in one week to three months, according to the <u>IAEA</u>, much faster than any intermittent inspections could detect that diversion. If a country opted instead to enrich its own HEU, ostensibly for submarines, it could make nuclear weapons even before building the submarines. The international community could not effectively block NPT signatories from pursuing such HEU submarine programs, by claiming the countries were less trustworthy than Australia, because that would be seen as discriminatory. Thus, the current AUKUS plan inevitably would foster the spread of nuclear weapons, thereby undermining the NPT.

NPT stakeholders share such concerns:

**Indonesia**, in an NPT <u>working paper</u>, "notes with concern the potential consequences of nuclear-powered submarine capability sharing to the global non-proliferation regime," which it warns, "increases the associated risks...posed by potential proliferation and conversion of nuclear material to nuclear weapons, particularly HEU in the operational status of nuclear naval propulsion."

**China**, in a new <u>report</u>, argues that, "The AUKUS nuclear-powered <u>submarines</u> collaboration is a serious violation of the object and purpose of the NPT, sets a dangerous <u>precedent</u> for the illegal transfer of weapons-grade nuclear materials from nuclear-weapon states to a non-nuclear-weapon state, and thus constitutes a blatant act of nuclear proliferation."

**Netherlands, Norway, and South Korea**, in an NPT working paper, recall that, "Minimization of the use of highly enriched uranium was established as a key nuclear security goal" at international nuclear security summits, and emphasize that, "Efforts to reduce stocks of highly enriched uranium and to minimize and eventually eliminate the use of highly enriched uranium are a form of permanent threat reduction and a fundamental element in our shared efforts to strengthen nuclear security."

**United States** nonproliferation experts and former government officials, in a <u>letter</u> to President Joe Biden, advise that, "The challenge of verifying that submarine fuel is not diverted for nuclear weapons would be significantly easier if the fuel were made with low-enriched uranium (LEU)" – which is not suitable for nuclear weapons – because "HEU fuel could be diverted directly to a nuclear weapon without further enrichment."

Misleadingly, Australia, United States, and United Kingdom assert in an NPT working paper that, "nuclear material inside of these reactors would not be in a form that can be directly used in nuclear weapons without further chemical processing, requiring facilities that Australia does not have and will not seek." In reality, the HEU in submarine fuel has a form like that in research reactors and pharmaceutical factories, which have been required to convert to LEU precisely because their HEU could be converted quickly and easily to metal for nuclear bombs, in small and undetectable facilities that even terrorists could build and operate.

The world already has converted 71 <u>research reactors</u>, and all four of the biggest <u>medical-isotope</u> <u>producers</u>, from HEU to LEU, precisely because the "form" of the HEU is no defense against proliferation. Considering that the world has deemed it too dangerous to allow even a few kilograms of HEU in a research reactor or pharmaceutical facility on dry land that can be monitored constantly, it would be catastrophically irresponsible to allow a NNWS to have tons of HEU for a submarine program that cannot be inspected frequently.

Fortunately, the alternative of <u>LEU submarines</u> under AUKUS could strengthen the NPT, especially given that, "Australia has decided to voluntarily <u>commit</u> not to domestically enrich or reprocess nuclear material in support of its nuclear-powered submarine program." Since LEU cannot be used to make nuclear weapons without further enrichment – a process that is protracted and detectable – Australia's acquisition of LEU submarines under such conditions would set a positive precedent, demonstrating how a country could obtain nuclear naval propulsion without fostering proliferation. The international community then could insist that other countries seeking nuclear submarines meet the same standard.

Australia has several options to acquire LEU submarines. Most obviously, it could purchase them from <u>France</u>, which already builds and refuels LEU submarines – and could do so for Australia too. Alternatively, Australia could request that its AUKUS partners provide LEU submarines, which the U.S. government has been <u>researching</u> since 2016, and either refueling services or life-of-ship reactor cores.

For many decades until September 2021, all three AUKUS countries – <u>Australia</u>, <u>United States</u>, and <u>United Kingdom</u> – opposed expansion and advocated minimization of HEU commerce, including as reactor fuel, on grounds that it undermined the NPT goal of preventing the spread of nuclear weapons. The AUKUS decision to transfer HEU submarines to a NNWS was a profound error made by a <u>small circle</u> of officials ignorant of their countries' longstanding nonproliferation policies to minimize HEU commerce. Rather than continue implementation of this ill-informed decision that threatens to vitiate the NPT, all three countries should declare by the end of this review conference that any nuclear submarines transferred or built under AUKUS would use LEU fuel.

Online version of this statement, including hyperlinks, available at www.NPPP.org