NUCLEAR PROLIFERATION PREVENTION PROJECT

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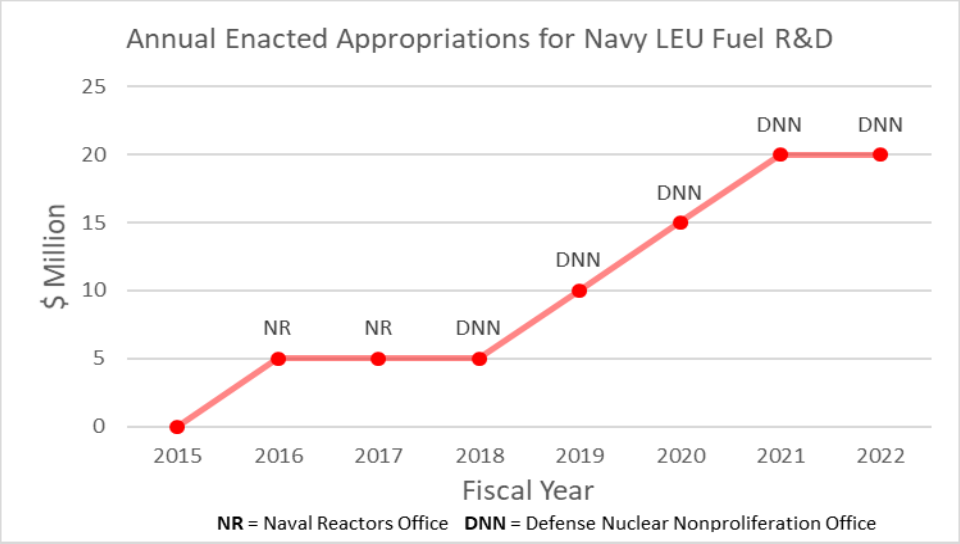
U.S. Congress Funds Navy LEU Fuel R&D for 7th Year in Row
Australia Can Avoid Bomb-Grade Uranium Fuel in AUKUS Submarines

SYDNEY, AUSTRALIA – Late this week, both houses of the U.S. Congress approved a comprehensive annual funding bill for FY2022 including $20 million for development of low-enriched uranium (LEU) fuel for the nuclear reactors that propel naval submarines and aircraft carriers – a proliferation-resistant alternative to the weapons-grade, highly enriched uranium (HEU) fuel currently used by the U.S. Navy. If developed successfully, the LEU fuel also would be suitable for Australia's future submarines under the September 2021 AUKUS agreement. President Biden is expected to sign the bill into law this week, providing a seventh straight year of funding for development of the less risky naval LEU fuel.

Australia aims to be the first country lacking nuclear weapons to acquire nuclear-powered submarines, setting an important precedent. If Australia chooses HEU fuel, its eight planned submarines would require import of a total of about 4 tons of weapons-grade uranium, sufficient for at least 160 nuclear weapons. Other countries, including Iran, would likely respond by demanding equivalent rights to import or produce HEU for their own prospective nuclear navies, creating grave proliferation concerns.

"It is no exaggeration to say that Australia's choice of fuel for its nuclear submarines may help determine whether nuclear weapons spread rapidly or not in decades ahead," said Alan J. Kuperman, NPPP's coordinator who is visiting Australia for a week of lectures and meetings on reducing the proliferation risks of AUKUS.

The U.S. R&D program aims to develop LEU fuel providing identical power and lifetime as existing HEU fuel in naval reactors, thereby reducing proliferation risks while avoiding refueling. The U.S. legislative provision, adopted on March 9-10, 2022, is attached. France and China already fuel their naval reactors with LEU but choose to refuel rapidly during routine maintenance of their vessels.



DEPARTMENT OF ENERGY

(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Final Bill	Final Bill vs Enacted	Final Bill vs Request
Global Material Security:					
International Nuclear Security	78,939	79,939	79,939	+1,000	---
Domestic Radiological Security	185,000	158,002	158,002	-26,998	---
International Radiological Security	90,000	85,000	95,000	+5,000	+10,000
Nuclear Smuggling Detection and Deterrence	175,000	175,000	198,500	+23,500	+23,500
Subtotal, Global Material Security	528,939	497,941	531,441	+2,502	+33,500
Nonproliferation and Arms Control	148,000	184,795	184,795	+36,795	---
National Technical Nuclear Forensics R&D	40,000	---	---	-40,000	---
Defense Nuclear Nonproliferation R&D:					
Proliferation Detection	255,000	269,407	269,407	+14,407	---
Nuclear Detonation Detection	267,000	271,000	294,500	+27,500	+23,500
Nonproliferation Fuels Development	20,000	---	20,000	---	+20,000
Nonproliferation Stewardship Program	59,900	87,329	100,329	+40,429	+13,000
National Technical Nuclear Forensics	---	45,000	45,000	+45,000	---
Subtotal, Defense Nuclear Nonproliferation R&D	601,900	672,736	729,236	+127,336	+56,500
Nonproliferation Construction:					
18-D-150 Surplus Plutonium Disposition Project, SRS	148,589	156,000	156,000	+7,411	---
Subtotal, Nonproliferation Construction	148,589	156,000	156,000	+7,411	---