



Volume 4 - September 2024

In our latest edition of NENSC News, the [Nuclear Energy and National Security Coalition \(NENSC\)](#) brings you the latest industry news, events you don't want to miss, and policies we are watching. Be sure to keep scrolling to learn how you can follow us and stay up to date with the latest information you need.

Please share our newsletter with a friend or colleague. If this email was forwarded to you, [subscribe for future NENSC communications here](#).

LEAD STORY

Goodman Discusses Nexus of Climate Change and National Security



Sherri Goodman

Sherri Goodman, former Deputy Undersecretary of Defense for Environmental Security, current Secretary General of the International Military Council on Climate and Security, and member of the NENSC Expert Council, [shares her views with Talking Climate](#) on how the U.S. military is handling climate threats.

UPCOMING NENSC WEBINAR

The Role of Nuclear Energy in the Evolving National Security Landscape

NENSC will host a webinar in the near future on *"The Role of Nuclear Energy in the Evolving National Security Landscape,"* during which a panel of experts will explore the critical intersection of nuclear energy and national security. The event will address how a robust nuclear energy enterprise can advance U.S. national security interests in an increasingly complex global environment. Additional details are forthcoming.

U.S. LEGISLATIVE AND REGULATORY DEVELOPMENTS

Harris v. Trump on America's Nuclear Energy Future: [This article](#) compares the nuclear energy policies of potential Harris-Walz and Trump-Vance administrations, noting bipartisan support for nuclear power in the U.S. Both administrations are likely to continue advancing nuclear energy, but with different motivations: Democrats focus on rapid decarbonization and environmental equity, while Republicans emphasize economic competitiveness and regulatory streamlining. Despite varying approaches, the future of nuclear energy in the U.S. appears promising under either administration.

House Science Committee Holds Markup on SMR Bill: On September 25th, the House Committee on Science, Space, and Technology held [a full committee markup](#) on several bills, including a newly introduced bill on SMR demonstrations. The "Small Modular Reactor Demonstration Act of 2024," [introduced](#) by Rep. Strong (R-AL), would create a program within DOE to construct and demonstrate two near-term SMR or micro-reactor projects that can be fully deployed by 2034. The [bill text can be read here](#) and is cosponsored by Reps. Aderholt (R-AL) and Ross (D-NC).

House Votes on Nuclear Fuel Bill Under Suspension: The House last week approved the "Milestones for Advanced Nuclear Fuel Act," which directs DOE to award milestone-based projects across the domestic nuclear fuel supply chain, including uranium production, conversion, fabrication, enrichment, deconversion, and recycling. The text of the bill [is here](#) and a fact sheet on the bill [is here](#).

Senators File Manager's Package to FY 2025 National Defense Authorization

Act. The 2025 National Defense Authorization Act (NDAA) is a must-pass bill, and several significant civil nuclear provisions have been included in the Manager's Package. Additional information on the Senate version of NDAA may be found [here](#). The House version of the legislation was passed in June.

Senate Hearing on Fusion Technology: On September 19, 2024, the Senate Committee on Energy & Natural Resources (ENR) [held a hearing](#) on "Examining Fusion Energy Technology Development." The witnesses were Dr. Patrick White from the Nuclear Innovation Alliance ([testimony](#)), Jackie Siebens from Helion Energy ([testimony](#)), and Dr. Jean Paul Allain from DOE's Office of Fusion Energy ([testimony](#)). During the hearing, both Republicans and Democrats expressed concern about the urgency of U.S. efforts in the global fusion energy race, particularly in light of China's rapid advancements and investments. Bipartisan support was also expressed for enhancing regulatory frameworks and public-private partnerships to accelerate fusion commercialization. Republicans argued for the swift passage of the Energy Permitting Reform Act (EPRA), costs associated with fusion energy, and operational timelines. Democrats emphasized the need to shift focus from scientific research to engineering and material sciences to achieve practical fusion energy deployment. The full hearing can be [watched here](#).

DOE Announces HALEU Critically Benchmarking Awards: DOE announced they have awarded \$17M to 16 "experiment and analysis projects" whose data will assist the NRC in the licensing and regulation of HALEU. These 16 projects are the first awarded under the [DOE & NRC's Criticality Benchmarking solicitation](#) and will cover five topic areas that support the development of data that will be useful to the NRC licensing evaluation process and industry's licensing submittals pertaining to commercial-scale HALEU operations. A complete list of the awards can be found [here](#). *Note: These are not the HALEU Enrichment or Deconversion Awards, which have yet to be released.*

DOE Highlights 5 Key Workforce Trends in the Booming Nuclear Energy Sector: [A report](#) by DOE's Office of Policy highlights trends in the U.S. Energy Sector, demonstrating how the nuclear energy industry is experiencing [significant growth](#), with a diverse and aging workforce, a high unionization rate, and increasing demand for qualified workers. In 2023, the sector added over 1,800 jobs, totaling 68,008 workers, with women and non-white workers well-represented. However, the workforce is older, and the industry faces challenges in attracting younger talent. Employers are struggling to find qualified workers, highlighting the need for expanded training programs. Additionally, nuclear energy has the highest unionization rate in the energy sector, leading to better pay and job security.

DOE Releases Study on Potential Sites for New Reactors: A [new DOE](#)

[analysis](#) suggests that up to 95 GW of new nuclear capacity could be added at existing and recently retired nuclear power plant sites in the U.S. This would help [meet the rising electricity](#) demand as the country moves toward net-zero emissions by 2050. The report examined 54 operating and 11 retired sites, finding many suitable for large or advanced reactors. Additionally, sites with previous licensing applications could speed up the process for new builds. The study also highlights the [potential for nuclear development near](#) coal plants, further boosting capacity.

INL Completes Construction of Sample Preparation Laboratory: INL has [completed substantial construction](#) of the Sample Preparation Laboratory (SPL), the first new hot cell facility built at INL in 49 years. Set to be operational in 2025, SPL will enhance research into structural nuclear materials, aiding the development and qualification of materials that extend the life of advanced reactors. Built under budget and ahead of schedule, the facility will provide state-of-the-art resources for visiting researchers and foster collaborations with other national labs, universities, and the nuclear industry.

U.S. Investigates Chinese Uranium Imports Amid Concerns of Russian Ban

Circumvention: The Biden Administration is [probing a sharp rise](#) in enriched uranium imports from China, starting in late 2023, amid suspicions that these shipments may be helping Russia evade a recent ban on Russian uranium imports. The ban has led to concerns that China may be "gaming the ban" by using Russian uranium for its own needs while exporting its domestically enriched uranium to the United States. DOE and other agencies are monitoring the situation, as any circumvention could undermine efforts to eliminate U.S. dependence on Russian fuel and develop a domestic uranium supply chain.

INTERNATIONAL NUCLEAR DEVELOPMENTS

Ghana and U.S. Sign NuScale SMR Agreement at Nuclear Energy Summit At the U.S.-Africa Nuclear Energy Summit in Nairobi, Ghana's Nuclear Power Ghana (NPG) and U.S. developer Regnum Technology Group, with assistance from the Department of State and the Department of Energy, signed an [agreement to deploy](#) a NuScale SMR plant in Ghana. The project is part of the Department of State's FIRST Program, which aids Ghana in building nuclear expertise through technical training, workforce development, and infrastructure support. The U.S. and Ghana do not currently have a 123 Agreement; however, [one is under negotiation](#).

China Approves Four New Westinghouse AP1000 Reactors: Westinghouse [has announced](#) that China's State Council has approved the construction of four additional AP1000 reactors at the Bailong and Lufeng Nuclear Power Plants. This expansion will bring the total number of AP1000 reactors in China to 16. The AP1000 technology, noted for its advanced safety and efficiency features, is also being deployed in other international markets, including Poland, Ukraine, and Bulgaria, with a total of 18 units expected to be operational globally by the end of the decade.

EU Commission President Wants More Nuclear: During a Security Conference in Prague last week, European Commission President Ursula von der Leyen [called for](#) the European Union to be more self-sufficient in energy production and called for more nuclear energy production.

Switzerland Moves to Lift Ban on New Nuclear Plants: Switzerland announced plans to [end its 2018 ban](#) on new nuclear plant construction, aiming to address energy supply concerns and support its 2050 net zero goal. The government will propose legislative changes by year-end, with parliamentary and referendum discussions anticipated in 2025. This shift comes amid growing debates across Europe about the role of nuclear power in future energy strategies.

US and Nigeria Announce Strategic Civil Nuclear Cooperation: During a recent U.S.-Nigeria Strategic Energy Dialogue, both countries [announced](#) new cooperation under the

Department of State's Foundational Infrastructure for Responsible Use of Small Modular Reactor Technology (FIRST) capacity-building program. The cooperation, in a series of upcoming workshops, will advance Nigeria's consideration of the potential role of advanced nuclear energy technologies in Nigeria's clean energy mix, consistent with the highest standards of nuclear security, safety, and nonproliferation.

Putin Proposes Export Restrictions on Strategic Raw Materials: Russian President Vladimir Putin [has directed](#) the Russian government to explore potential restrictions on the export of key strategic raw materials, including uranium, titanium, and nickel. This move aims to assess the impact of such restrictions on the economy, ensuring they do not harm Russia's economic interests. Putin highlighted the country's significant reserves of natural gas, gold, and diamonds and emphasized that any potential export limits should be carefully considered to avoid economic drawbacks.

South Korea Grants Construction Permit for New Shin Hanul Nuclear Units South Korea's Nuclear Safety and Security Commission [has approved](#) the construction of units 3 and 4 at the Shin Hanul nuclear power plant, marking a shift back to nuclear energy under President Yoon Suk-yeol's administration. Korea Hydro & Nuclear Power (KHNP) will start full-scale construction on September 13, 2024, after a five-year suspension due to policy changes. The new units, using advanced APR1400 technology, are expected to be completed by 2032 and 2033. The project follows recent plans to revitalize South Korea's nuclear power sector and includes a significant equipment supply contract with Doosan Enerbility.

Italy Considers New Nuclear-Power Company Amid Energy Policy Shift Italy [is exploring](#) the creation of a new company to develop small nuclear reactors, marking a significant policy shift away from its decades-long ban on nuclear power. Preliminary talks involve Ansaldo Nucleare, Enel, and Newcleo, with a focus on partnering with international technology providers. The initiative aims to introduce advanced nuclear technology to Italy, driven by recent government efforts to reverse previous bans and enhance energy production.

Russia Plans to Build 34 New Nuclear Reactors by 2042: Russia's Unified Energy System has [unveiled a draft plan](#) to expand its nuclear power sector with the construction of up to 34 new reactors by 2042. The plan, open for public consultation, aims to increase nuclear power's share of Russia's electricity generation from 18.9% to 23.5%. It includes the construction of reactors at 11 sites, as well as replacements at existing plants and new facilities. Key components include VVER-optimum reactors and advanced fourth-generation BREST-OD-300 reactors. The expansion is part of a broader strategy to achieve a 25% nuclear share by 2045 and support long-term energy needs and economic growth.

Sapporo 5 Release Joint Statement on Fuel Supply Chain: Representatives from the United States, Canada, France, Japan, and the United Kingdom, referred to as the "Sapporo 5", released [a joint statement](#) on the margins of the IAEA General Conference in Vienna, Austria. The statement highlighted their progress on commitments made at COP28 to invest in nuclear fuel production capacity. They initially pledged \$4.2 billion over three years but have already mobilized \$5.6 billion, exceeding their target. The group called on nuclear utilities, industrial end-users, and financial institutions to join the effort by mobilizing private capital to ensure diversification and security of supply. Finally, the group extended an invitation to like-minded nations to support the initiative.

IN THE NEWS

WSJ: [Can a Closed Nuclear Power Plant From the '70s Be Brought Back to Life?](#) [Paywall]

FORTUNE: [The U.S. Must Pursue 'Fleet-scale' Nuclear Development to Ensure the Lessons Learned at Vogtle Won't be for Naught.](#) [Op-Ed] [Paywall]

Energy Intelligence: [The Rise of the US Nuclear Newbuild Matchmakers.](#)

Idaho National Laboratory: [Opportunities for AP1000 Deployment at Existing and Planned Nuclear Sites](#) [Report]

Barron's: [Get Ready for the New Nuclear Age. It Could Help Solve America's Electricity Problems.](#) *[Paywall]*

IEEE: [TSMC's Energy Demand Drives Taiwan's Geopolitical Future.](#)

Issues in Science and Technology: [What Can Fusion Energy Learn from Biotechnology?](#)

Brookings: [A Nuclear Energy Renaissance?](#) *[Article and Podcast]*

DOE Office of Nuclear Energy: [DOE Report Finds More Than 60 Gigawatts of New Nuclear Capacity Could Be Built at Existing Nuclear Power Plants.](#)

Columbia Center on Global Energy Policy: [Lessons from the Nuclear Waste Negotiator Era of the 1990s for Today's Consent-Based Siting Efforts.](#) *[Report]*

Utility Dive: [Why Many Environmentalists are Warming to Nuclear Power.](#) *[Op-Ed]*

IEEE: [India Backs Small Nuclear Reactors to Power Heavy Industry.](#)

Climate Portal: [Could Nuclear Energy be Used for Transportation, Like in a Car?](#)

World Nuclear News: [Industry Groups Ask Governments to Commit to Nuclear Expansion.](#)

Tech Xplore: [US nuclear plant Three Mile Island to Reopen, Sell Power to Microsoft.](#)

The Economist: [China is Beating America in the Nuclear Energy Race.](#)

UPCOMING EVENTS



[COP29 United Nations Climate Conference](#)

November 11 - 24

Baku, Azerbaijan

WHAT ARE WE MISSING?

What type of coverage are you looking for? Submit your thoughts and feedback [HERE](#).
Please note that we are not able to commit to the completion of any specific request. All feedback will be kept confidential.

Please share our newsletter with a friend or colleague. If this email was forwarded to you,
[subscribe for future NENSC communications here](#).

For more information, visit us online at nensc.org



[Unsubscribe](#) | [Update Profile](#) | [Constant Contact Data Notice](#)



Try email marketing for free today!