

NUCLEAR MONITOR

November 29, 2025 | Issue #932

A PUBLICATION OF WORLD INFORMATION SERVICE ON ENERGY (WISE)
AND THE NUCLEAR INFORMATION & RESOURCE SERVICE (NIRS)

WISE/NIRS

Nuclear Monitor

The World Information Service on Energy (WISE) was founded in 1978 and is based in the Netherlands.

The Nuclear Information & Resource Service (NIRS) was founded in the same year and is based in the U.S. WISE and NIRS joined forces in the year 2000 to produce Nuclear Monitor.

Nuclear Monitor is published in English, 10 times a year, in electronic (PDF) format only. Back issues are published on the WISE website two months after being sent to subscribers (www.wiseinternational.org/nuclear-monitor).

SUBSCRIPTIONS

10 issues

NGOs / individuals 67,50 Euros

Institutions / Industry 235 Euros

US and Canada: Contact NIRS for details (nirs@nirs.org)

All other countries: Subscribe via the WISE website

www.wiseinternational.org

ISSN: 2542-5439

CONTACTS

WISE

info@wiseinternational.org

www.wiseinternational.org

NIRS

nirs@nirs.org

www.nirs.org

Nuclear Monitor

monitor@wiseinternational.org

www.wiseinternational.org/nuclear-monitor

Monitored this issue:

Speed over safety is the mandate for US nuclear power expansion

Linda Pentz Gunter, Beyond Nuclear

2

Increasing battery capacity will soon make nuclear power superfluous

Jan van Evert, reporter WISE-Netherlands

5

Nuclear News

6

- World Nuclear Power Status
- 3.5 Million - Signature Petition Sends a Clear message: Japan Must Join the TPNW
- No To Nuclear
Why Nuclear Power Destroys Lives, Derails Climate Progress and Provokes War

NIRS
Nuclear Information and Resource Service

wise
World Information Service on Energy
Founded in 1978

Speed over safety is the mandate for US nuclear power expansion

Linda Pentz Gunter

In President Donald Trump's gilded United States, good taste is not in fashion. But lying most certainly is. Wind power gives you cancer. The measles vaccine causes autism in children. There is no inflation. The biggest US cities are out of control and consumed with rampant violent crime (but only the ones run by Democrats). By now, we have almost forgotten those dog- and cat-eating Haitians in Ohio, or the Biden administration's Frankensteinian scheme to create transgender mice in our nation's laboratories.

The fact that none of this is true doesn't faze Trump or his obedient acolytes one iota. It's no surprise then, that the White House unleashed (a favorite word) a slew of executive orders on May 23 this year that would put nuclear power on an impossibly fast and risky expansion timeline, unfettered from what the administration views as overly burdensome safety oversight.

Four of the executive orders signed by Trump that day specifically addressed nuclear power: [Ordering the Reform of the Nuclear Regulatory Commission](#); [Reinvigorating the Nuclear Industrial Base](#); [Reforming Nuclear Reactor Testing at the Department of Energy](#); and [Deploying Advanced Nuclear Reactor Technologies for National Security](#).

A fifth — [Restoring Gold Standard Science](#) — apparently needed a little explanation. “Gold Standard Science is just that—science that meets the Gold Standard,” read the accompanying [press release](#).

Collectively, the four orders on fast-tracking nuclear power would: reduce and undermine the already inadequate safety oversight authority of the US Nuclear Regulatory

Commission (NRC); pave the way for speedy approval of unproven new reactor projects without regard for safety, health or environmental impacts; curtail or possibly even end public intervention; weaken already insufficient radiation exposure standards; and reopen the pathway between the civil and military sectors.

The orders also effectively put in motion what was already contained in the ADVANCE Act, passed under the Biden administration, which stands for “Accelerating Deployment of Versatile, Advanced Nuclear for Clean Energy,” and which first introduced the intention to mandate the reckless fast-tracking of new nuclear power projects.

Meanwhile, the Department of Government Efficiency (DOGE), created and for a time led by the mercurial billionaire Elon Musk, invaded the headquarters of the NRC with Musk's metaphorical chainsaw, cutting huge numbers of often key staff and installing its own puppet master to whom whoever was left would be answerable. That person reportedly [told a meeting](#) of NRC commissioners and staff members that they would be expected to “rubber stamp” new reactor license applications.

The NRC's mission statement even got changed to reflect the new propaganda line that nuclear power is good for you. Instead of “protecting people and the environment,” the NRC is now about “enabling the safe and secure use and deployment of civilian nuclear energy technologies,” for “the *benefit* of society and the environment.” [emphasis added]

All of this was necessary because, according to criticism from the White House, a view echoed by the nuclear industry, the NRC “charges applicants by the hour to process license applications with prolonged timelines that maximize fees while throttling nuclear power development.” Nevermind that the NRC has been a nuclear industry lapdog for years, repeatedly capitulating to the financial concerns of nuclear owners and operators at the cost of robust public safety measures.

The executive orders demand, among other things, that licensing time frames are slashed to “a deadline of no more than 18 months” for final decisions on construction and operating license applications for new reactors, and to just one year “for final decision in an application to continue operating an existing reactor of any type.”

They also demand “the reactivation of prematurely shuttered to partially completed nuclear facilities.” The former refers to Palisades (Michigan), Three Mile Island (Pennsylvania) and Duane Arnold (Iowa) so far. The latter is about the abandoned two-reactor Westinghouse AP 1000 project at V.C. Summer in South Carolina. Currently operating reactors will be expected to add “5 gigawatts of power uprates”, which comes with its own set of safety concerns, given the risks of running aging US reactors hotter.

A pilot program for reactor construction and operation outside the National Laboratories will require the Energy Secretary to “approve at least three reactors pursuant to this pilot program with the goal of achieving criticality in each of the three reactors by July 4, 2026,” one order said. An astonishing “10 new large reactors with complete designs under construction by 2030,” is another aspiration.

The Secretary of Energy must also designate at least one site for advanced reactor technologies within three months of the order, and ensure that it will host a fully operational

reactor there “no later than 30 months from the date of this order.” Everything has been put on a superhighway to nuclear hell, unhinged from the very real obstacles to fast-tracking nuclear expansion, most notably the cost and risks.

The impetus for all this is not because nuclear power is a good energy choice — it’s the slowest, most expensive and by far the most dangerous one, with a still unsolved lethal radioactive waste problem. Nor is it due to some misguided belief that nuclear power is the best way to address the climate crisis. Clearly renewable energy is quicker and cheaper while also being one of the fastest growing employment sectors in the US — at least it was until Trump began cancelling solar and wind energy programs. None of the planned new reactors are likely to arrive in enough quantity anytime soon to make a meaningful — if any — reduction in carbon emissions.

Instead, the motivation here is the same one that guides the Trump regime every day — bigger profits for Trump’s corporate friends at the expense of the American people. It’s no surprise to learn that Trump’s Secretary of Energy is Chris Wright, a former fracking baron and board member of Oklo, one of the nuclear startup companies whose reactor, Aurora, stands to benefit from weakening or even removing the regulatory hurdles that have thus far stood in its way.

In January 2022, the NRC denied Oklo’s license application outright because it “continues to contain significant information gaps in its description of Aurora’s potential accidents as well as its classification of safety systems and components,” the agency said. These gaps now risk being overlooked or ignored.

Instead, the benefits for Oklo and other similar manufacturers keep pouring in. Immediately after the executive orders on nuclear power were released, Oklo’s [stocks soared](#). Then, in

September, it emerged that Trump was preparing to give away at least 25 metric tons of plutonium to commercial reactor startup companies that need it to fuel their new and untested designs, including Oklo's Aurora reactor.

That prompted a [letter](#) from three US senators who pointed out that the amount was "enough for approximately 2,000 nuclear bombs" and that "Such a step goes against long-standing, bipartisan U.S. nuclear security policy. It raises serious weapons proliferation concerns, makes little economic sense, and may adversely affect the nation's defense posture."

In addition to worrying about whether the US would run out of plutonium to feed its nuclear arsenal, one of the senators, Democrat Ed Markey of Massachusetts, also questioned in a [second letter](#) to President Trump whether there wasn't a glaring conflict of interest here, given Wright's previous role with Oklo, "because the plutonium transfer will benefit Secretary of Energy Chris Wright's former company," Markey wrote. "Accordingly, in addition to my concerns about proliferation, I have questions about the propriety of the transaction."

But there were other concerns as well. The interference of DOGE, whose staff report back to the Energy Department, and the "rubber stamp" remark by one of its leaders, also prompted worry from members of Congress that the NRC commissioners themselves may feel pressure to approve reactor designs they did not consider safe. Senator Sheldon Whitehouse, a Democrat from Rhode Island who is an ardent supporter of nuclear power, called the staff cuts at NRC a "personnel bloodbath".

"Should you decide a nuclear design is unsafe," asked Democratic senator, Adam Schiff of California during a recent Senate Energy and Public Works Committee [hearing](#)

with the three NRC Commissioners seated at the time, "do you think you are at risk of being fired from the commission by a president who has demonstrated a willingness to fire commissioners without cause?"

The NRC Commission Chair, David Wright (no relation to Chris Wright), and a Republican appointee, attempted to dodge the answer. "It doesn't matter. I'm going to make the right decision and I'll stand by that decision," Wright insisted.

"But you acknowledge that if you find that a reactor design is unsafe and vote that way, that you may be fired by the administration?" Schiff persisted. "I think that's a possibility, yes," conceded Matthew Marzano, one of two Democratic appointees. The other, Bradley Crowell, went a little further. "I think on any given day I could be fired by the administration for reasons unknown," he said.

This had already happened to their fellow Democratic commissioner Christopher Hanson in June when Trump dismissed him without grounds and possibly illegally even though Hanson's term was not set to expire until 2029.

But this was just the beginning of the hemorrhaging that Crowell, at least, finds disturbing. "My greatest concert is the current NRC workforce," Crowell told the Senate committee. "The agency has been directed to do more with less despite growing workload and aggressive timeframes. This is an unsustainable dynamic. The NRC is not just losing technical experts. We have lost valuable senior executives. These conditions are not a recipe for success."

Linda Pentz Gunter is the founder of [Beyond Nuclear](#) and serves as its international specialist.

Increasing battery capacity will soon make nuclear power superfluous

Jan van Evert

The most used argument used by pro nuclear lobbyists and politicians is that we need a stable 'base-load' to compensate the fluctuating output of solar and wind power. Another often heard problem is the German word 'Dunkelflaute': a period during winter when there is a lack of solar and wind power. According to Jan Vos, chairman of the NWEA (Dutch wind energy association), this is often highly exaggerated. Co-author of the Adequacy Outlook Koen Gorrisen says: "on average this problem occurs six hours per year". And these problems can soon be moved to the history books: battery prices are falling rapidly resulting in a rapid expansion of installed battery capacity worldwide.

In Australia utility scale batteries are now injecting about 1 gigawatt (GW) electrical power on average every day at peak output, and by definition charging a bit more. But we ain't seen nothing yet: In about two years time, there will be around 16 GW of capacity that will be operating. Worldwide battery deployment nearly doubles every year. In 2024, developers deployed over 160 gigawatt-hours of new battery storage, which is nearly as much in one year as in all recorded history. The manufacturing capacity is already being put in place: global battery production is on track to reach twice even the most ambitious (net zero) International Energy Agency forecasts by 2030.

As deployment scales, costs continue to fall; by as much as forty percent last year. Battery storage quality has improved dramatically as well - with near "plug and-play" grid systems cutting installation time and cost, longer lifetimes (some warrantied for as much as 20 years), and minimal fire risk. Seen through the lens of past storage revolutions, one thing becomes clear: forecasts almost certainly underestimate how large electricity storage will become. Most energy outlooks tend to only model the bare minimum needed to balance grids; typically 30 to 40 TWh globally in the long term. As battery costs fall, they will appear everywhere: not only at solar farms

and substations, but also in businesses and homes. This will help to stabilise the power grid.

The latest development is the rise of sodium-ion batteries (SIBs). They have many advantages such as the fact that they use no critical minerals like lithium. Cobalt, copper, and nickel are not required for many types of sodium-ion batteries. Theoretically, sodium battery costs should be much lower than lithium's. However, as of 2025, due to the lack of large-scale production, the price of sodium-ion batteries is roughly the same as that of lithium-ion cells. But that could soon change. In the coming years, as sodium battery production scales up, the cost is expected to halve - the same price level as lithium batteries. CATL, the world's biggest lithium-ion battery manufacturer, announced in 2022 the start of mass production of SIBs. The French company Tiamat announced earlier this year that it has started construction of a SIB factory in France that will start production in 2027. It is a pilot project with a production capacity of several million batteries per year.

An even newer system has been developed by the Finnish company Polar Night Energy. They have built and operate the world's first commercial sand battery. It converts excess electrical power into heat that is stored in a large container filled with sand. A simple and cheap system that supplies this heat to the district heating network in the winter. The first sand battery is an about four meters wide and seven meters high steel container that has a patented and automated heat storage system and about a hundred tons of sand inside. It has been in operation since 2022 and has a capacity of 8 MWh. The company has also started a 'Sand to Power Pilot' that will be able to convert the stored heat back into electricity. Construction will be finished in 2026 and commercial-scale projects are expected to start the year after.

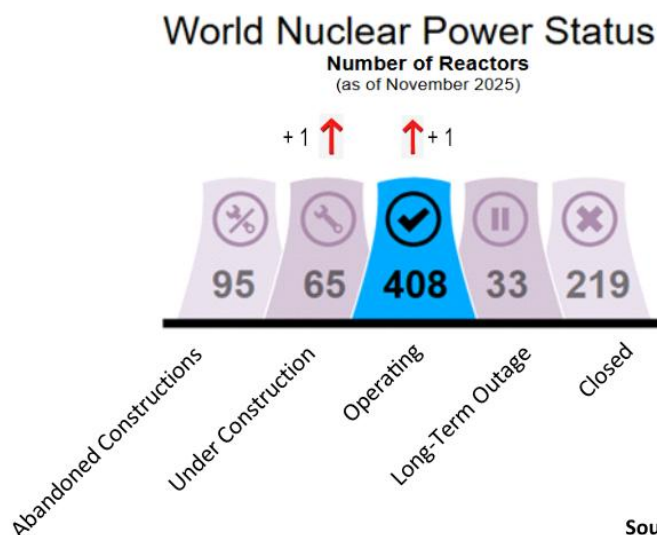
Sources:

<https://www.bonnenbatteries.com/sodium-ion-battery-vs-lithium-ion-battery-a-friendly-comparison/#Conclusion>
<https://ember-energy.org/latest-insights/silos-for-sunshine-weve-mastered-harvesting-the-sun-but-storage-is-the-gamechanger>

<https://reneweconomy.com.au/big-batteries-are-scaling-up-but-we-aint-sending-nothing-yet-when-it-comes-to-capacity-and-price-impact>
<https://polarnightenergy.com>

Wikipedia

NUCLEAR NEWS



Source: <https://www.worldnuclearreport.org>

- ✓ Construction of Sanao-3 and Zhaoyuan-1 has started in China.
- ✓ Also in China, Zhangzhou-2 is connected to the grid.

3.5 Million - Signature Petition Sends a Clear Message: Japan Must Join the TPNW

At simultaneous rallies in Tokyo and Hiroshima in November 2025, Hibakusha and supporters from across the country gathered to deliver a simple, urgent demand: Japan must uphold and strengthen its commitment to peace by enshrining the Three Non-Nuclear Principles into law and joining the Treaty on the Prohibition of Nuclear Weapons (TPNW). Read further at <https://www.icanw.org/japan-3-5-million-petition-join-tpnw>



No To Nuclear

Why Nuclear Power Destroys Lives, Derails Climate Progress and Provokes War

‘Linda Pentz Gunter has done a great service in highlighting the nuclear chain reaction and exposing the huge human and environmental costs. We need this book for our environment and a peaceful world’

– Jeremy Corbyn

Read more about her book at

<https://www.plutobooks.com/product/no-to-nuclear/> where you can also pre-order the book.