

Amazon To Invest More Than \$500 Million In Small Modular Nuclear Reactors To Power AWS



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It's starting to feel like every single day the embrace of nuclear to power the future of data centers takes hold tighter. Just hours ago, it was Google [inking a deal](#) with Kairos Power for small modular reactors.

Today, it's Amazon, putting on display why our "[next AI trade](#)" will generate obnoxious amounts of alpha in the coming years, **as they commit to investing more than \$500 million to develop small module reactors**, according to [CNBC](#).

Amazon Web Services is launching three projects from Virginia to Washington State. AWS has partnered with Dominion Energy to explore building a small modular reactor (SMR) near the North Anna nuclear station in Virginia. SMRs, which produce no carbon emissions, have smaller footprints and faster construction times than traditional reactors.

CNBC [writes](#) that Virginia hosts nearly half of the U.S. data centers, with Northern Virginia's "Data Center Alley" in Loudoun County handling 70% of the world's internet traffic daily.

Dominion Energy, meanwhile, supplies 3,500 megawatts to 452 data centers across Virginia, with most in Data Center Alley. Typical data centers require 30 megawatts or more, and Dominion is now receiving requests for 60 to 90 megawatts. It expects demand to grow by 85% in the next 15 years. AWS's new SMRs are projected to add at least 300 megawatts of power to the region.



Matthew Garman, CEO of AWS said: "We see the need for gigawatts of power in the coming years, and there's not going to be enough wind and solar projects to be able to meet the needs, and so nuclear is a great opportunity."

"Also, the technology is really advancing to a place with SMRs where there's going to be a new technology that's going to be safe and that's going to be easy to manufacture in a much smaller form," he continued. "These SMRs will be powering directly into the grid, so they'll go to power everything, part of that is the data centers, but everything that is plugged into the grid will benefit."

Virginia Gov. Glenn Youngkin added: "Small modular nuclear reactors will play a critical role in positioning Virginia as a leading nuclear innovation hub. Amazon Web Services' commitment to this technology and their partnership with Dominion is a significant step forward to meet the future power needs of a growing Virginia."

Recall, on Monday, Google - picking up on what we discussed last week in "[Google Turns To Nuclear To Power Its Data Centers](#)" - announced plans to buy power from Kairos Power's small modular reactors (SMRs) as part of a growing industry shift toward nuclear energy to meet rising data center demands.

By purchasing energy from multiple SMRs, Google aims to send a strong market signal while supporting long-term commercialization.

This week, ZeroHedge favorite Oklo, a SMR company backed by Sam Altman, [announced](#) it had received a key approval from the U.S. Department of Energy for its Conceptual Safety Design Report (CSDR) for the

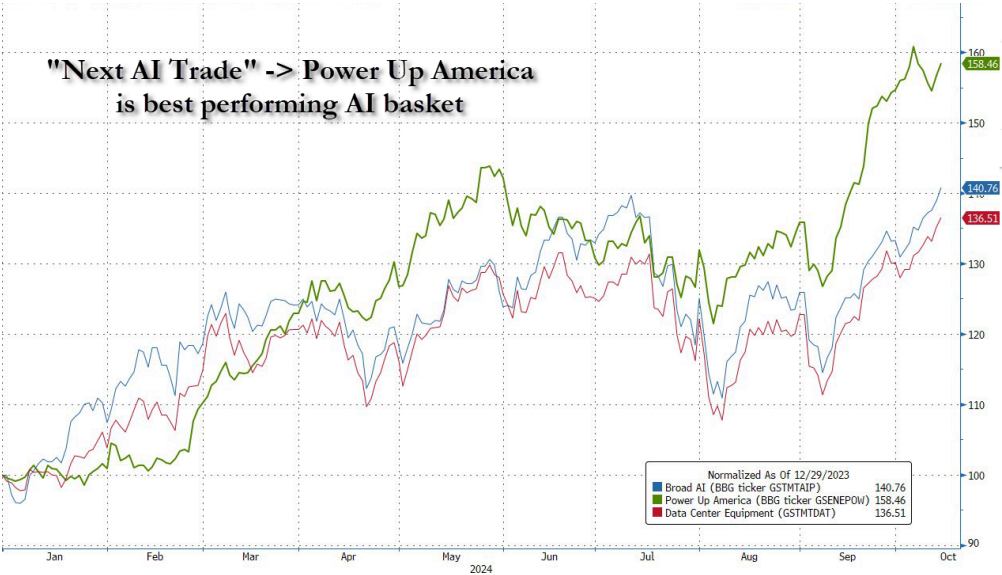
Aurora Fuel Fabrication Facility at Idaho National Laboratory (INL), where it plans on building. Those shares are responding to the Amazon news this morning again, after already charging higher by almost 40% since last Monday.



Separately, [we also wrote at the beginning of this month](#) that the U.S. had closed on a \$1.5 billion loan to resurrect Holtec's Palisades Nuclear Plant. The [report](#) at the time said that **the Biden administration aims to triple U.S. nuclear power capacity** as demand rises and climate concerns grow.

Pennsylvania Governor Josh Shapiro has also been [urging](#) for Three Mile Island to reopen as quickly as possible. Following Microsoft's agreement to purchase power from the dormant nuclear plant, Shapiro urged regulators to prioritize the reactor's connection to the electrical grid, [according to Barron's](#).

The latest news out of Amazon and Google provide substantial tail wind for our ["Next AI Trade"](#) which we laid out in April as our favorite long-term trade, and where we outlined various investment opportunities for powering up America, playing out.



The [stellar returns](#) of the trade in 2024 so far are just the start: as more capital is allocated to *"those who provide the electricity to those who sell the picks and shovels for the next gold rush"*, the basket will blow away every other segment of the market, and the biggest winners will be not those who bet on the revolutionary technology that is AI, but those who backed something much more primitive: the electricity needed to power it.