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Xe-Mobile (/Reactors/Xe-Mobile)
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Amazon Invests in X-energy to Support Advanced Small Modular Nuclear Reactors and Expand Carbon-Free Power (/media/news-releases/amazon-invests-in-x-energy-to-support-advanced-small-modular-nuclear-reactors-and-expand-carbon-free-power)

Financing Update

- Amazon's Climate Pledge Fund, Citadel Founder and CEO Ken Griffin, affiliates of Ares Management Corporation, NGP, and the University of Michigan, invest approximately $500 million in Series C-1 financing round for X-energy.
- Amazon, X-energy aim to bring more than 5 gigawatts online in the United States by 2039, the largest commercial deployment target of SMRs to date.
- Amazon commits to support initial 320-megawatt project with Energy Northwest in central Washington.
- Investment solidifies X-energy's leading role in commercializing SMR technology to revolutionize the nuclear industry.

ROCKVILLE, Md., October 16, 2024 – X-Energy Reactor Company, LLC ("X-energy"), a leader in advanced nuclear reactor and fuel technology, today announced a Series C-1 financing round of approximately $500 million, anchored by Amazon.com, Inc. ("Amazon"). The investment will help meet growing energy demands by funding the completion of X-energy's reactor design and licensing as well as the first phase of its TRISO-X fuel fabrication facility in Oak Ridge, Tennessee. Additionally, the funding will support future carbon-free projects that will use X-energy's Xe-100 advanced small modular nuclear reactors ("SMRs"). Citadel Founder and CEO Ken Griffin, affiliates of Ares Management Corporation ("Ares"), NGP, and the University of Michigan join Amazon's Climate Pledge Fund in the financing round.

Amazon and X-energy are also collaborating to bring more than 5 gigawatts of new power projects online across the United States by 2039, representing the largest commercial deployment target of SMRs to date. The efforts will help meet growing energy demands in key locations through direct project investments and long-term power purchase agreements to help power Amazon operations. Further, X-energy and Amazon plan to establish and standardize a deployment and financing model to develop projects in partnership with infrastructure and utility partners.

The companies will initially support a four-unit 320-megawatt ("MW") project with regional utility Energy Northwest in central Washington with the option to increase that project to 12 units and 960 MW. Amazon is immediately committing a direct investment in the Energy Northwest project to fund early development work that X-energy will perform.

"This collaboration between Amazon and X-energy is a significant step toward accelerating advanced nuclear technologies that can help us bring new sources of carbon-free energy to the grid cost-effectively and safely," said Kevin Miller, Amazon's Vice President of Global Data Centers. "We need smart solutions that can help us meet growing energy demands while also addressing climate change. X-energy's technology will be integral in helping achieve this, and is an important step in Amazon's work to achieve our Climate Pledge commitment to be net-zero by 2040."

"Nuclear is an important source of clean and reliable power that our nation needs to meet the growing demand for energy," said Ken Griffin, Founder and CEO of Citadel, whose affiliate is one of the lead investors in this round. "X-energy provides an impactful solution to a critical challenge – and the support Amazon, Dow, and other major corporations have provided underscores its potential and merit."

"Amazon and X-energy are poised to define the future of advanced nuclear energy in the commercial marketplace," said X-energy CEO J. Clay Sell. "To fully realize the opportunities available through artificial intelligence, we must bring clean, safe, and reliable electrons onto the grid with proven technologies that can scale and grow with demand. We deeply appreciate our earliest funders and collaborators, notably the U.S. Department of Energy and Dow Inc. With Amazon, Ken Griffin, and our other strategic investors, we are now uniquely suited to deliver on this transformative vision for the future of energy and tech."

X-energy's pioneering Xe-100 advanced small modular reactor and TRISO-X fuel are among the safest and most reliable clean energy technologies. Each reactor unit is engineered to provide 80 MW of electricity and is optimized in multi-unit plants ranging from 320 MW to 960 MW. The innovative and simplified modular design is road-shippable and intended to drive geographic scalability, accelerate construction timelines, and create more predictable and manageable construction costs. X-energy's advanced reactor technology offers remarkable efficiency and resiliency to meet the requirements of energy-intensive data centers, allowing Amazon to align its growth and carbon-free energy goals.

X-energy is developing its initial Xe-100 plant at Dow Inc.'s UCC Seadrift Operations manufacturing site on the Texas Gulf Coast. Supported by the U.S. Department of Energy's ("DOE") Advanced Reactor Demonstration Program ("ARDP"), the project will be the first grid-scale advanced nuclear reactor deployed to serve an industrial site in North America, providing the site with zero-carbon emissions power and high-temperature steam. ARDP also supports X-energy's first-in-the-nation commercial facility to exclusively manufacture TRISO fuel, which DOE calls "the most robust nuclear fuel on Earth."

Additional Commentary

Kam Ghaffarian, Ph.D., Founder and Executive Chairman, X-energy

- "The investments from Amazon, our Series C-1 funders, and valued partners like Dow and the U.S. Department of Energy underscore X-energy's leadership in commercializing SMR technology and delivering the clean, safe, affordable, and reliable power our world needs now. Reaching this milestone is a testament to the dedication of the X-energy team and the essential energy solutions we've built. We remain focused on bringing our advanced reactor technology to market, enabling a future powered by sustainable, zero-carbon energy."

Allyson Satin, Partner, Ares

- "Ares is proud to further strengthen its support for X-energy and the advancement of nuclear technologies as it enters this partnership and significantly accelerates its mission to support the transition to a lower-carbon economy. Through our work together over the last two years, we are confident in X-energy's ability to capitalize on the rapidly increasing demand for scalable clean energy sources and drive long-term, sustainable value for its stakeholders."

Maritza Liaw, Partner, NGP

- "NGP recognizes the unique contribution of nuclear energy to reliable, carbon-free, baseload electricity and industrial heat. X-energy has a world-class team, well-tested reactor and fuel design, and committed collaborators in Dow and Amazon who are both leaders in their industries. We are proud to

partner with X-energy to bring advanced nuclear energy to market."

Erik Lundberg, Chief Investment Officer, University of Michigan

- "The University of Michigan has been at the forefront of the energy transition, strategically investing in a diverse portfolio of sustainable and renewable energy and other climate solutions, including utility-scale solar, renewable fuels, and sustainable infrastructure. The U-M Investment Office is proud to partner with X-energy as part of its broader commitment to transitioning to a more sustainable economy. As part of its comprehensive approach to achieving a low-carbon future, the U-M Investment Office recognizes advanced nuclear technologies as a key component to its climate solutions investment strategy, reinforcing its commitment to long-term decarbonization goals."

Advisors

Latham & Watkins LLP is acting as legal advisor to X-energy, and Moelis & Company is acting as exclusive financial advisor and placement agent.

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About X-energy

X-Energy Reactor Company, LLC, is a leading developer of advanced small modular nuclear reactors and fuel technology for clean energy generation that is redefining the nuclear energy industry through its development of safer and more efficient advanced small modular nuclear reactors and proprietary fuel to deliver reliable, zero-carbon and affordable energy to people around the world. X-energy's simplified, modular, and intrinsically safe SMR design expands applications and markets for deployment of nuclear technology and drives enhanced safety, lower cost and faster construction timelines when compared with other SMRs and conventional nuclear. For more information, visit X-energy.com (https://x-energy.com) or connect with us on Twitter (https://twitter.com/xenergynuclear) or LinkedIn.

About Amazon

Amazon is guided by four principles: customer obsession rather than competitor focus, passion for invention, commitment to operational excellence, and long-term thinking. Amazon strives to be Earth's Most Customer-Centric Company, Earth's Best Employer, and Earth's Safest Place to Work. Customer reviews, 1-Click shopping, personalized recommendations, Prime, Fulfillment by Amazon, AWS, Kindle Direct Publishing, Kindle, Career Choice, Fire tablets, Fire TV, Amazon Echo, Alexa, Just Walk Out technology, Amazon Studios, and The Climate Pledge are some of the things pioneered by Amazon. For more information, visit amazon.com/about (https://www.aboutamazon.com) and follow @AmazonNews.

Meta

DECEMBER 3, 2024 ENERGY

Accelerating the Next Wave of Nuclear to Power AI Innovation

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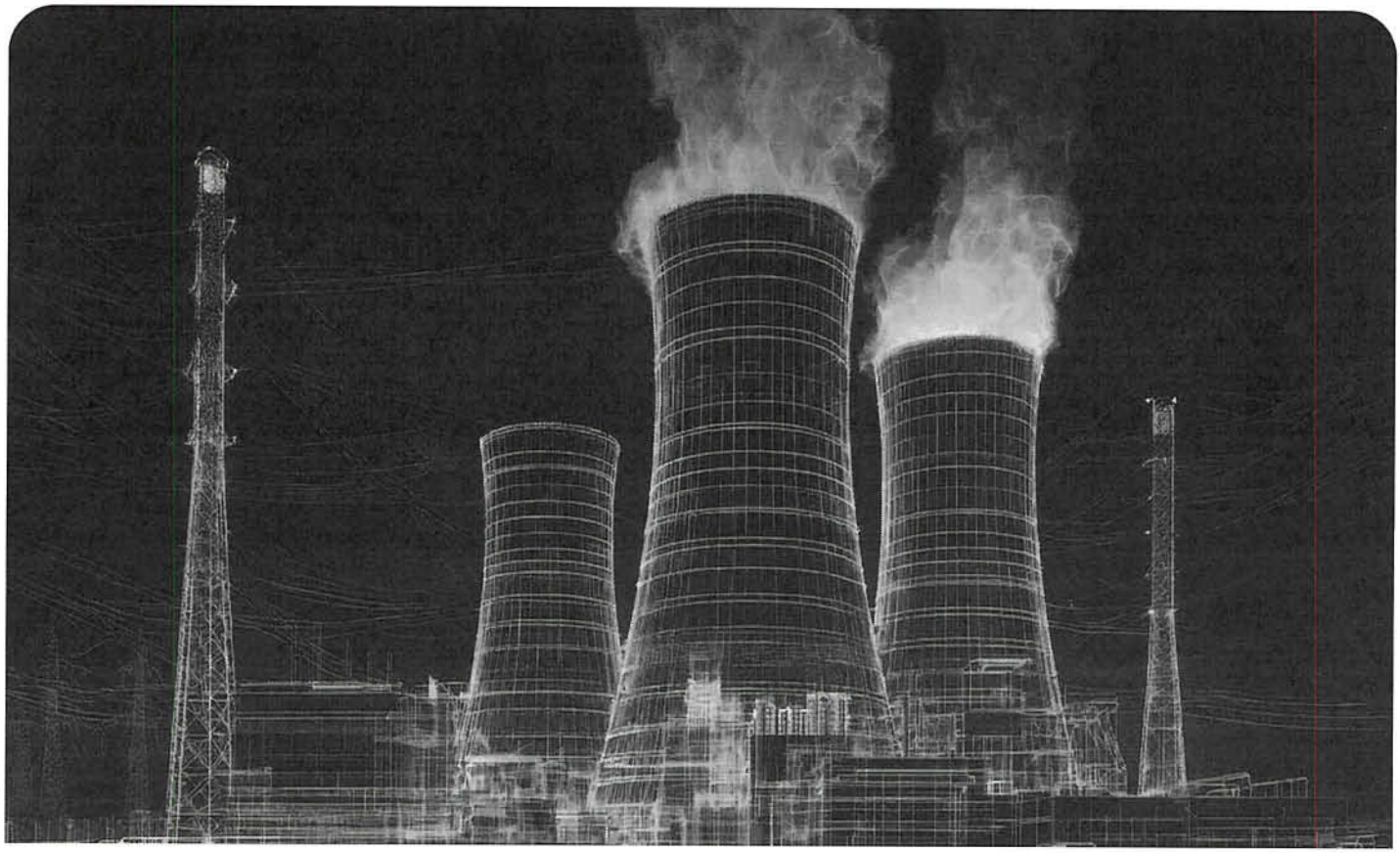

- Today, Meta announced it will release a request for proposals (RFP) to identify nuclear energy developers to help us meet our AI innovation and sustainability objectives — targeting 1-4 gigawatts (GW) of new nuclear generation capacity in the U.S.; qualified developers can fill out the intake form to receive further guidance on the RFP process.
- We are taking an open approach with this RFP so we can partner with others across the industry to bring new nuclear energy to the grid.

Advancing the technologies that will build the future of human connection — including the next wave of AI innovation — requires electric grids to expand and embrace new sources of reliable, clean and renewable energy. As new innovations bring impactful technological advancements across sectors and support economic growth, we believe that nuclear energy can help provide firm, baseload power to support the growth needs of the electric grids that power both our data centers (the physical infrastructure on which Meta's platforms operate) as well as the communities around them.

Supporting the development of clean energy must continue to be a priority as electric grids expand to accommodate growing energy needs. At Meta, we believe nuclear energy will play a pivotal role in the transition to a cleaner, more reliable, and diversified electric grid. That is why today we announced that we will be releasing a request for proposals (RFP) to identify nuclear energy developers to help us meet our AI and sustainability objectives.

Our aim is to add 1-4 GW of new nuclear generation capacity in the U.S. to be

When we began engaging with the renewable energy industry more than a decade ago, the industry was scaling. Our early engagement with developers of renewable energy allowed Meta to design contracts that enable both Meta and our developer partners to achieve our respective goals. We want to work creatively with developers to structure an agreement that will similarly enable development of nuclear technology.

Compared to renewable energy projects that we continue to invest in, such as solar and wind, nuclear energy projects are more capital intensive, take longer to develop, are subject to more regulatory requirements, and have a longer expected operational life. These differences mean we need to engage nuclear energy projects earlier in their development lifecycle and consider their operational requirements when designing a contract. And, as scaling deployments of nuclear technology offers the best chance of rapidly reducing cost, engaging with a partner across projects and locations will allow us to ensure that we can deploy strategically. An RFP process will allow us to approach these projects thoroughly and thoughtfully with these considerations in mind.

As we look ahead to our next decade of innovation and growth, we are planning for our data center energy needs while simultaneously contributing to a reliable grid and advancing our sustainability commitments. Building on our efforts to bring new clean and renewable energy to the grid — including solar, wind, battery storage, and, most recently, geothermal — we continue to look for innovative ways to enable additional clean energy resources. Since 2020, we have matched our global operations with 100% clean and renewable energy and focused on bringing new resources to the grid through innovative partnerships – totaling over 12,000 MW of renewable energy contracts worldwide to date. Going forward, this commitment is more important

Sustainability

Get the latest news about our sustainability work, download reports and resources and explore our energy dashboards.

Learn More

NEWS EPRI

EPRI Launches Initiative to Enhance Data Center Flexibility and Grid Reliability

EPRI launches DCFlex, a collaborative initiative with major tech and energy companies, aiming to enable data center sustainability and grid efficiency amid rising electricity demand driven by AI.

October 29, 2024