



X-energy, Talen Energy to Evaluate Gigawatt-Scale XE-100 SMR Deployment

March 19, 2026

ROCKVILLE, Md. – March 19, 2026 – [X-energy Reactor Company, LLC](#) (“X-energy” or the “Company”), a leading developer of advanced nuclear reactors and fuel technology, and [Talen Energy Corporation](#) (“Talen”) ([NASDAQ: TLN](#)), a leading independent power producer, signed a Letter of Intent (“LOI”) to assess deploying X-energy’s [XE-100 small modular reactors](#) (“SMR”) in Pennsylvania and across the PJM Interconnection Regional Transmission Organization (“PJM”) market. X-energy and Talen (“the Companies”) will explore opportunities to deploy three or more four-unit XE-100 plants to add clean baseload capacity to help support reliability and meet growing energy demand from onshoring of manufacturing, data centers, and electrification.

Under the agreement, X-energy and Talen plan to conduct early-stage project development activities, including feasibility studies, site evaluations, and a project execution framework. While specific siting parameters have yet to be finalized, the Companies intend to assess opportunities to transition fossil-fired generation to nuclear power through X-energy SMRs, leveraging established infrastructure, transmission connectivity, and workforce resources.

X-energy’s XE-100 is an 80-megawatt high-temperature gas-cooled reactor that is strongly aligned to meet the Mid-Atlantic region’s growing energy needs, with unique characteristics well-suited to regional grids, hyperscale data centers, and other large commercial off-takers. The XE-100 is deployed as a four to twelve-unit plant, with each reactor capable of coming online independently upon completion. This allows end users to phase in capacity one unit at a time, aligning new generation with demand growth and matching power supply to real-world load expansion. The XE-100’s advanced design also enables the efficient use of air-cooling systems, significantly reducing overall water usage, and offering greater siting flexibility as compared to conventional reactors.

The partnership intends to support Talen’s commitment to Powering the Future. Repowering or adding capacity with technologies like the XE-100 enables power providers to utilize new sources of energy while preserving critical transmission infrastructure and local economic continuity.

Our agreement with Talen is an important step forward to strengthen baseload capacity and meet growing energy demands in the PJM market. Our small modular reactor technology is uniquely suited to meet these demand opportunities reliably and safely, with the scalability and flexibility to deploy across a range of project sites.

[Dinkar Bhatia](#), *X-energy’s Chief Commercial Officer.*

Talen believes that future power demand needs an all-of-the-above supply approach, and this includes new nuclear technology. Commercial nuclear energy is a proven carbon-free energy source that provides for energy independence and diversification. We look forward to working with X-energy as part of our broader commitment to Powering the Future.

Talen President Terry Nutt

X-energy is currently developing more than 11 gigawatts (“GW”) of new nuclear capacity across commercial partnerships in the United States and United Kingdom. In Texas, X-energy and Dow are advancing a proposed four-unit plant to power industrial processes under the [U.S. Department of Energy’s Advanced Reactor Demonstration Program](#). This is expected to be followed by Energy Northwest’s [Cascade Advanced Energy Facility](#), the first of several X-energy and Amazon projects to deploy at least [5 GW of new nuclear by 2039](#), as well as [a 6 GW commitment from Centrica](#) for the United Kingdom’s first fleet of advanced reactors. Together, these commercial projects further the company’s mission to provide clean, safe, reliable energy solutions capable of meeting growing power demand in the United States, and around the world.

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](#) or connect with us on [X](#) or [LinkedIn](#).

About Talen Energy

Talen Energy ([NASDAQ: TLN](#)) is a leading independent power producer and energy infrastructure company dedicated to powering the future. We own and operate approximately 13.1 gigawatts of power infrastructure in the United States, including 2.2 gigawatts of nuclear power and a significant dispatchable fossil fleet. We produce and sell electricity, capacity, and ancillary services into wholesale U.S. power markets, with our generation fleet principally located in the Mid-Atlantic, Ohio and Montana. Our team is committed to generating power safely and reliably and delivering the most value per megawatt produced. Talen is also powering the digital infrastructure revolution. We are well-positioned to serve this growing industry, as artificial intelligence data centers increasingly demand more reliable power. Talen is headquartered in Houston, Texas. For more information,

visit <https://www.talenenergy.com/>.

Forward Looking Statements

This communication contains forward-looking statements within the meaning of the federal securities laws, which statements are subject to substantial risks and uncertainties. These forward-looking statements are intended to qualify for the safe harbor from liability established by the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical fact included in this communication, or incorporated by reference into this communication, are forward-looking statements. Throughout this communication, we have attempted to identify forward-looking statements by using words such as “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “forecasts,” “goal,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “seek,” “should,” “will,” or other forms of these words or similar words or expressions or the negative thereof, although not all forward-looking statements contain these terms. Forward-looking statements address future events and conditions concerning, among other things, the success of this partnership and proposed project, capital expenditures, litigation, regulatory matters, hedging, liquidity and capital resources, accounting matters, expectations, beliefs, plans, objectives, goals, strategies, future events or performance, shareholder returns and underlying assumptions.

Forward-looking statements are subject to substantial risks and uncertainties that could cause our future business, financial condition, results of operations or performance to differ materially from our historical results or those expressed or implied in any forward-looking statement contained in this communication. All of our forward-looking statements include assumptions underlying or relating to such statements that may cause actual results to differ materially from expectations and are subject to numerous factors that present considerable risks and uncertainties.

Contact

X-energy Contact
Robert McEntyre
inquiries@X-energy.com
[\(240\) 673-6565](tel:(240)673-6565)

Talen Investor Relations
Sergio Castro
Vice President & Treasurer
InvestorRelations@talenergy.com

Talen Media
Taryne Williams
Director, Corporate Communications
Taryne.Williams@talenergy.com