Centrica and X-energy Sign Joint Development Agreement to Deploy U.K.'s First Advanced Modular Reactors and Pursue 6 Gigawatts of New Nuclear Capacity in the U.K.

September 14, 2025

- *Preferred first project is expected to be at EDF and Centrica's Hartlepool site, paving the way for a national fleet of up to 6 GW of advanced reactors with the ability to provide enough power for 14 million homes.*
- *Fleet deployment target is the largest announced to date for Advanced Modular Reactors in the U.K. and could generate at least $54 billion in economic activity, creating thousands of high-quality jobs.*
- *Deployed new nuclear capacity is set to make a significant contribution to the next wave of clean, secure electricity and high temperature heat for industry and manufacturing.*

LONDON, September 15, 2025 – Centrica plc ("Centrica") and X-Energy, LLC ("X-energy"), a wholly-owned subsidiary of X-Energy Reactor Company, LLC, today announced their entry into a Joint Development Agreement ("JDA") to deploy X-energy's Xe-100 Advanced Modular Reactors ("AMR") in the United Kingdom. The companies have identified EDF and Centrica's Hartlepool site as the preferred first site for a planned U.K. fleet of up to 6 gigawatts.

The agreement represents the first stage in a new trans-Atlantic alliance which could ultimately mobilize at least $54 billion in economic value to bring clean, safe and affordable power to thousands of homes and industries across the country and substantive work for the domestic and global supply chain.

A 12-unit Xe-100 deployment at Hartlepool could add up to 960 megawatts ("MW") of new capacity, enough clean power for 1.5 million homes and over $15 billion in lifetime economic value. It would be developed at a site adjacent to Hartlepool's existing nuclear power station which is currently scheduled to cease generating electricity in 2028. Following its decommissioning, new reactors would accelerate opportunities for the site and its skilled workforce. The site is already designated for new nuclear under the Government's National Policy Statement and a new plant would also play a critical role in generating high-temperature heat that could support Teesside's heavy industries.

Centrica will provide initial project capital for development with the goal of initiating full-scale activities in 2026. Subject to regulatory approval, the first electricity generation would be expected in the mid-2030s. Centrica and X-energy are already in discussions with additional potential equity partners, as well as leading global engineering and construction companies, with the goal of establishing a UK-based development company to develop this first and subsequent projects.

> Centrica is proud to be at the forefront of Britain's clean energy transition – investing in infrastructure and jobs that meet today's energy needs while enabling tomorrow's ambitions. Our partnership with X-energy marks a bold step forward in delivering advanced nuclear technology that is not only scalable and secure, but also vital to clean industry and powering homes. The Xe-100 fleet will help build a resilient energy system that supports national security, affordability, and sustainability. From Sizewell C to Hartlepool, we are backing Britain's energy future – and building it.
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> *Chris O'Shea, CEO of Centrica*
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> Our partnership with Centrica represents a commitment to bring X-energy's industry-leading advanced nuclear technology to the U.K. at scale. Together, we aim to build a fleet that has the ability to reliably deliver clean power, strengthen energy security, and grow the trans-Atlantic economy for decades to come. We believe Hartlepool is the right place to begin this journey, with an established industry and a base of professionals and services who can help drive the next generation of nuclear forward.
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> *J. Clay Sell, CEO of X-energy*

In 2021 the U.K.'s Department of Energy Security and Net Zero (DESNZ) identified High-Temperature Gas-cooled Reactors (HTGRs) as the most promising advanced technology for demonstration. In 2025 X-energy and Cavendish Nuclear completed a number of year-long assessments, co-funded by DESNZ's 'Future Nuclear Enabling Fund', to support the commercial deployment of Xe-100s in the U.K. Discussions are now underway with Government regarding the "route to market" in the UK, consistent with the principles set out in June for supporting privately led projects. The Government's ongoing work to create a clear and credible pathway is instrumental in making the UK an attractive destination for investment in advanced modular reactors. Support for initial projects, and those that follow, will be decisive in unlocking the full potential of advanced nuclear for Britain's energy future.

> This cross-Atlantic partnership demonstrates the transformative potential for the British people of US and UK businesses joining forces, with X-Energy and Centrica's planned first project alone having the potential to create up to 2,500 good, skilled jobs, add £12 billion in economic value and generate enough energy to power 1.5 million homes. By working with the US, we will reap the benefits of this golden age of nuclear, powering British homes with clean, homegrown energy, delivering well-paid skilled jobs and getting energy bills down for good.

U.K. Secretary of State for Energy Security and Net Zero Ed Miliband

With President Trump's leadership, the United States is ushering in a true nuclear renaissance – harnessing the power of commercial nuclear to meet rising energy demand and fuel the AI revolution. Meeting this demand will require strong partnerships with our allies around the world and robust collaboration with private sector innovators. Today's commercial deals set up a framework to unleash commercial access in both the U.S. and UK, enhancing global energy security, strengthening U.S. energy dominance, and securing nuclear supply chains across the Atlantic.

United States Secretary of Energy Chris Wright

As part of its role to enable further new nuclear development in the UK, EDF welcomes the interest by Centrica and X-Energy in Hartlepool as the first site to develop this technology, and we will support the development plans as they evolve.

Simone Rossi, CEO of EDF in the UK

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, or 200 MW thermal heat for industrial uses, and is optimized in multi-unit plants ranging from 320 MW to 960 MW. The innovative and simplified modular design is intended to drive geographic scalability, accelerate construction timelines, and create more predictable and manageable construction costs. X-energy's advanced reactor technology is designed to offer remarkable efficiency and resiliency to support both electricity generation and high-temperature heat and steam for industrial applications.

X-energy is advancing its initial Xe-100 plant with Dow Inc. at a manufacturing site in the United States along the Texas Gulf Coast, a key demonstration of the flexible power and industrial steam applications of its technology. X-energy is developing its second plant with Energy Northwest in collaboration with Amazon as part of a larger strategy with Amazon to bring more than five gigawatts of new power projects online by 2039.

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About Centrica

Centrica is a uniquely integrated energy company operating primarily in the UK and Ireland. At the heart of our business is our talented team of 20,000 colleagues, including 7,000 engineers who serve millions of customers every day through trusted brands like British Gas, Bord Gáis Energy and Centrica Business Solutions. Today, we are unique among energy companies in the UK and Ireland, operating across the entire energy value chain through a variety of distinct, but complimentary businesses, all of which share the same purpose – energising a greener, fairer future.

About X-Energy Reactor Company, LLC

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, sustainable 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.

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