



TerraPower Begins Construction on Advanced Nuclear Project in Wyoming

The beginning of construction activities on the Natrium™ demonstration project site marks the first advanced nuclear reactor project under construction in the Western Hemisphere.

BELLEVUE, Washington – June 10, 2024 – TerraPower, a leading nuclear innovation company, today celebrated the start of construction on the Natrium reactor¹ demonstration project. This marks the first advanced reactor project to move from design into construction.

“This groundbreaking represents the beginning of the next era of nuclear energy. The Natrium reactor is more than a design, it’s a plant coming to life that will support both the clean energy transition and our historic energy communities,” said Chris Levesque, TerraPower President and CEO. “Our innovative Natrium technology will provide dispatchable carbon-free energy, gigawatt-scale energy storage, and long-term jobs to the Lincoln County community.”

The ceremony brought together TerraPower leaders, government officials, Natrium project partners, industry champions and community supporters.

TerraPower Chairman and Founder, Bill Gates, said “I’m proud of all the partners and people who helped get the most advanced nuclear project in the world built in Kemmerer, Wyoming. I believe that TerraPower’s next-generation nuclear energy will power the future of our nation—and the world.”

“Today we celebrate a trifecta. This first-of-its-kind project is good for the community of Kemmerer-Diamondville, the State of Wyoming, and our nation. As Natrium moves boldly toward establishing a new domestic energy source, it offers the promise of hundreds of jobs, enhanced careers, and renewed vitality,” said Wyoming Governor Mark Gordon. “This project also demonstrates how good things can happen when the private and public sectors work together to solve problems. Advances made here will bolster Wyoming’s ability to produce another source of dispatchable power securely. In Wyoming we know energy — and we will continue to provide it to help keep our nation competitive and safe.”

“This is a challenging yet exciting time in the energy industry. In an era of rapid change, the need for reliable, affordable and dispatchable energy will remain a constant,” said Cindy Crane, CEO of PacifiCorp. “Innovative technologies like the Natrium project will enhance our ability to serve our customers, meet growing demand and ensure a reliable and resilient energy future.”

Approximately 1,600 workers will be needed for construction at the project’s peak. Construction is set to span five years. Once the plant is operational, the company estimates that 250 people will support day-to-day activities, including plant security.

Upon completion, the Natrium demonstration plant will be a fully functioning commercial power plant. It is being constructed near a retiring coal-fired power plant and is the only coal-to-nuclear project under development in the world.

¹ A TerraPower and GE-Hitachi technology

The project features a 345 MW sodium-cooled fast reactor with a molten salt-based energy storage system. The storage technology can boost the system's output to 500 MW of power when needed, which is equivalent to the energy required to power around 400,000 homes. The energy storage capability allows the plant to integrate seamlessly with renewable resources and is the only advanced reactor design with this unique feature.

Earlier this year, TerraPower submitted its construction permit application to the U.S. Nuclear Regulatory Commission (NRC) for the Natrium reactor. TerraPower is the first to submit its construction permit application for a commercial advanced reactor to the NRC. Due to its unique design, non-nuclear construction is beginning, while nuclear construction will begin after this application is approved.

Through the U.S. Department of Energy's Advanced Reactor Demonstration Program (ARDP), a public-private partnership, this Natrium reactor demonstration project is intended to validate the design, construction and operational features of the Natrium technology.

About TerraPower

TerraPower is a leading nuclear innovation company that strives to improve the world through nuclear energy and science. Since it was founded by Bill Gates and a group of like-minded visionaries, TerraPower has emerged as an incubator and developer of ideas and technologies that offer energy independence, environmental sustainability, medical advancement and other cutting-edge opportunities. It accepts and tackles some of the world's most difficult challenges. Behind each of its innovations and programs, TerraPower actively works to bring together the strengths and experiences of the world's public and private sectors to answer pressing global needs. Learn more at terrapower.com.

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