

From TerraPower

TerraPower selects Kemmerer, Wyoming as the preferred site for advanced reactor demonstration plan

LINK: <https://www.terrapower.com/natrium-demo-kemmerer-wyoming/>

PROJECT WILL BRING A FULLY FUNCTIONING NATRIUM™ POWER PLANT TO RETIRING COAL GENERATION SITE

BELLEVUE, Washington – November 16, 2021 – TerraPower today announced Kemmerer, Wyoming as the preferred site for the Natrium™ reactor demonstration project, which is a TerraPower and GE-Hitachi technology, and is one of two competitively-selected advanced reactor demonstration projects (ARDP) supported by the U.S. Department of Energy (DOE). The company selected the Kemmerer location, near the Naughton Power Plant, following an extensive evaluation process and meetings with community members and leaders.

“People across Wyoming welcomed us into their communities over the past several months, and we are excited to work with PacifiCorp to build the first Natrium plant in Kemmerer,” said Chris Levesque, president and CEO of TerraPower. “Our innovative technology will help ensure the continued production of reliable electricity while also transitioning our energy system and creating new, good-paying jobs in Wyoming.”

“This project is an exciting opportunity to explore what could be the next generation of clean, reliable, affordable energy production while providing a path to transition for Wyoming’s energy economy, communities and employees,” said Gary Hoogeveen, president and CEO of Rocky Mountain Power, a division of PacifiCorp.

“Just yesterday, President Biden signed the Bipartisan Infrastructure Deal and today DOE is already putting it to work with more than \$1.5 billion heading to Wyoming,” said Secretary of Energy Jennifer M. Granholm. “The energy communities that have powered us for generations have real opportunities to power our clean energy future through projects just like this one, that provide good-paying jobs and usher in the next wave of nuclear technologies.”

The demonstration project team evaluated a variety of factors when selecting the site of the Naughton Power Plant, where the remaining two coal units are scheduled to retire in 2025. Factors included community support, the physical characteristics of the site, the ability of the site to obtain a license from the Nuclear Regulatory Commission (NRC), access to existing infrastructure, and the needs of the grid.

“On behalf of Kemmerer and surrounding communities, we are pleased and excited to host the Natrium demonstration project. This is great for Kemmerer and great for Wyoming,” said Bill Thek, the mayor of Kemmerer.

The Natrium reactor demonstration project’s preferred siting is subject to the finalization of definitive agreements on the site and applicable permitting, licensing and support. TerraPower anticipates submitting the demonstration plant’s construction permit application to the NRC in mid-2023. The plant is expected to be operational in the next seven years, aligning with the ARDP schedule mandated by Congress.

According to project estimates, approximately 2,000 workers will be needed for construction at the project’s peak. Once the plant is operational, approximately 250 people will support day-to-day activities, including plant security.

The demonstration plant is intended to validate the design, construction and operational features of the Natrium 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.

Through the recently signed Infrastructure Investment and Jobs Act, DOE worked with Congress to allocate nearly \$2.5 billion in new funding for ARDP. This allocation, along with previous funding, will cover DOE’s commitment to TerraPower for the first five years of a seven-year, \$2 billion agreement. TerraPower will match this investment dollar for dollar. Federal funding is provided for the demonstration activity under a cost-shared cooperative agreement and the result of the project will be a commercially-owned generating asset.

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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