

THE POWER OF ENGAGEMENT

A Critical Mass: Natrium[®] Advanced Nuclear Reactor



Kemmerer, Wyoming

Engagement Overview

The success of public engagement around TerraPower's first-of-a-kind Natrium® advanced nuclear reactor has relied on private, local, regional, state, and federal support. The project is in development with the utility PacifiCorp and is a public-private partnership with the U.S. Department of Energy (DOE) sharing half the cost of development (up to \$2 billion). TerraPower and PacifiCorp followed robust engagement and site selection processes to identify a community that reciprocated interest in the project. Kemmerer, Wyoming was selected to host the project with local support due in part to the anticipated conversion of the nearby coal-fired power plant and proactive local and state leadership. TerraPower has maintained a constant presence in the community, with extensive efforts to provide information about the technology, safety features, and updates to the construction timeline.

Project Overview



TECHNOLOGY

Sodium Fast Nuclear Reactor



CAPACITY

345 MWe; up to 845 MWe with energy storage system



FIRST PROPOSED

2021



ESTIMATED IN-SERVICE

2030+

About Kemmerer

COMMUNITY TYPE

Rural

POPULATION

2,788

EMPLOYMENT RATE

57.1%

MEDIAN HOUSEHOLD INCOME

\$74,375

DEMOGRAPHICS

91.9% white

EDUCATION

94% high school degree, 27% bachelor's degree or higher

HEALTH

8.8% uninsured

KEY INDUSTRIES

Energy generation, mineral and fossil fuel extraction, healthcare



TIMELINE

2020

DOE awards TerraPower and GE-Hitachi fundin for an advanced reactor

202⁻

TerraPower and PacifiCorp announce plans to build in WY

June 2021

Five month evaluation process to identify host community begins

Nov. 2021

Kemmerer selected as host community

Nov. 2023

Environmental review process begins

June 2024

Construction begins

2030

Anticipated inservice date

Engagement Tactics

Aligning with the community: In 2019, Kemmerer received an economic diversification grant from the U.S. Department of Commerce's Economic Development Administration to fund a study preparing for the anticipated closure of the Naughton coal-fired power plant. The study identified nuclear energy as a potential economic opportunity—laying important groundwork just as TerraPower's proposed project was beginning to take shape.

Flexible siting: In 2021, TerraPower and PacifiCorp undertook a five-month search for a host community, looking broadly across PacifiCorp's multi-state territory before homing in on Wyoming following interest from state leadership. The search then focused on four communities in the state with existing coal plants. Multiple communities pitched themselves to the developer to aid in site selection—including Kemmerer, which was ultimately selected.

Soliciting input: To gauge public sentiment, city leaders included a survey about the proposed nuclear project in residents' water bills, aiming to collect candid feedback through anonymous responses. The results showed strong support: over 85% of respondents believed the project would benefit the local economy.

Local presence: Since the project idea was announced, TerraPower has hosted multiple presentations for local leaders and community members with detailed explanations of the technology, the anticipated development process, and associated safety mechanisms. TerraPower regularly provides updates on the project in public meetings, on the radio, and at events.

Workforce opportunities: Discussions around workforce, particularly on retraining coal workers, have been central to the project, which is expected to bring 1,600 construction jobs and 250 full time jobs when operational. TerraPower has hosted students from career training programs, signed a Project Labor Agreement with the North America's Building Trades Union, and is developing an international nuclear training center. Efforts are also underway at Western Wyoming Community College and University of Wyoming to establish nuclear programs.

Coordinating efforts: Multiple private, regional, state, and federal entities have engaged in the development of the nuclear reactor, including TerraPower itself, PacifiCorp, the City of Kemmerer, the Joint Powers Board with neighboring Diamondville, the regional South Lincoln Economic Development Corporation, elected state officials, the Wyoming Energy Authority, DOE, and the Nuclear Regulatory Commission (NRC).

Transparent processes: The NRC sent nearly a dozen staff to Kemmerer for a November 2023 information session on the environmental review process, which drew over 100 attendees, and has hosted additional in person and virtual information and public comment sessions. The NRC set up a robust dashboard on their website to track progress on the review process. Residents indicated that having so many eyes on the project has eased their concerns around safety.

Takeaways

Ultimately, a project that aligns with long-term community goals is set up for success. Proactive leadership from state and local officials and meaningful efforts by the developer to inform and engage the local community have been central to ongoing support for the project. Continued regional, state, federal, and private sector technical and financial support will be crucial to delivering on the promises made to the City and to the continued success of the advanced nuclear reactor.