DEMONSTRATING THE NATRIUM™ REACTOR AND INTEGRATED ENERGY SYSTEM:
COST-COMPETITIVE, FLEXIBLE TECHNOLOGY FOR THE CLEAN ENERGY FUTURE

The Natrium reactor and integrated energy system redefines what nuclear technology can be: competitive and flexible.

The Natrium technology is a TerraPower and GE-Hitachi technology with a cost-competitive, 345 MWe sodium fast reactor and gigawatt-hour-scale, molten salt energy storage. The storage can boost output to 500 MWe of power for more than five and a half hours when needed.

This innovative combination creates an integrated energy solution that provides clean, firm generation for electricity grids that have a growing mix of renewables. The Natrium technology will also help utilities capture more daily electricity revenue.

• 345 MWe reactor
• Gigawatt-hour-scale energy storage (capacity of 500 MWe output for 5.5+ hours)
• Cost-competitive, flexible technology that supports load following, energy storage and industrial process heat applications

www.NatriumPower.com

NUCLEAR TECHNOLOGY OF CHOICE FOR GOVERNMENT INVESTMENT
In October 2020, the U.S. Department of Energy (DOE) awarded TerraPower funding, as part of the Advanced Reactor Demonstration Program, to demonstrate the Natrium technology. In 2021, TerraPower announced that the Natrium demonstration plant would be located near a retiring coal facility in Wyoming.

FROM DEMONSTRATION TO COMMERCIALIZATION
This precedent-setting, public-private partnership will demonstrate the Natrium technology’s design, construction and operational features. To ensure the technology meets market needs, a team of leading nuclear companies will provide their supply chain and operational expertise. This collaboration aids the transition to a cost-effective, zero-carbon grid, which requires innovations in siting, licensing, operations and maintenance.

The Natrium reactor and integrated energy system will be available within this decade, making it one of the first commercial advanced nuclear technologies.

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