

EXCEED GEO ENERGY & Peregrine Turbine Technologies Announce Collaboration to Deploy Breakthrough sCO₂ Geothermal Energy

EXCEED Geo Energy and Peregrine Turbine Technologies (PTT) are pleased to announce a collaboration to deploy EXCEED's Infinity-Loop™ geothermal energy system.

AUSTIN, TX, UNITED STATES, April 10, 2025 /EINPresswire.com/ -- EXCEED Energy Inc. (EXCEED) and Peregrine Turbine Technologies (PTT) are excited

to announce a strategic collaboration to deploy EXCEED's next-generation Infinity-Loop™ geothermal energy system—an innovative platform combining advanced subsurface drilling, surface energy conversion, and integrated carbon sequestration.



“

EXCEED delivers scalable, carbon-negative baseload power for projects of all sizes, shaping the future of sustainable energy.”

EXCEED GEO ENERGY

sequestering carbon in the process.

At the heart of the Infinity-Loop™ is the use of supercritical CO₂ (sCO₂) as a working fluid, which significantly boosts heat extraction and power conversion—achieving up to 50% higher energy yields than conventional geothermal systems. This closed-loop system circulates sCO₂ through precision-engineered wellbores to extract heat from deep rock formations without releasing greenhouse gases, delivering sustainable, emission-free energy while

The partnership leverages EXCEED's expertise in deep horizontal drilling in ultra-high-temperature dry rock, coupled with advanced digital operations for predictive performance, system optimization, and reliability.

Power is converted using PTT's high-efficiency sCO₂ turbines, which outperform traditional steam turbines in efficiency, reliability, and compactness. Scalable from 10 to 50 megawatts

(MWe), PTT's turbines are based on Brayton-cycle architecture and represent the next evolution in thermal power generation. Both companies' systems are modular and scalable, making them ideal for rapid deployment and expansion.



With a land-use footprint of just 1,000 square feet per MW, EXCEED's geothermal facilities offer a dramatically lower spatial impact

compared to wind, solar, and traditional baseload technologies—unlocking new opportunities for clean, reliable power generation in space-constrained or environmentally sensitive areas.

This collaboration reflects a shared vision: to redefine geothermal energy through carbon-negative, baseload power and long-duration energy storage. The system is ideally suited for a wide range of applications—from data centers and utilities to industrial facilities, critical infrastructure, and remote or off-grid communities.

About EXCEED Energy Inc.

EXCEED Energy Inc. is a global leader in geothermal innovation, delivering scalable, carbon-negative baseload power through cutting-edge technologies and unmatched field expertise. With over 150 years of combined experience, EXCEED's team has drilled more than 3,250 oil and gas wells and 25+ geothermal wells, making it one of the most technically capable companies in the geothermal sector. Learn more at exceedgeoenergy.com.

About Peregrine Turbine Technologies (PTT)

Founded in 2012, PTT is a privately held company based in Maine, specializing in advanced sCO₂ turbine development for power generation, energy storage, and propulsion. PTT's technology has been supported by the Air Force Research Lab (AFRL), Office of Naval Research (ONR), and Maine Technology Institute (MTI), and is backed by a long-term CRADA with Sandia National Laboratories. The leadership team brings together over 250 years of experience across top aerospace and energy companies, including GE. Learn more at PeregrineTurbine.com

Robert Brooks

Peregrine Turbine Technologies

+1 207-687-8333

rbrooks@peregrineturbine.com

Visit us on social media:

[LinkedIn](#)

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2025 Newsmatics Inc. All Right Reserved.