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PRESS RELEASE

FOR IMMEDIATE RELEASE

Peregrine Turbine Technologies Announces First Successful Test Run of Breakthrough sCO2 Technology

Wiscasset, ME- November 16, 2022 – Peregrine Turbine Technologies (PTT) announces the World's First start and run of a sCO2 Brayton Cycle Turbine powered from phase change thermal energy storage. This breakthrough enables greater penetration of renewable energy sources and accelerates the transition to clean energy.

Successful Motorless / Black Start

The November 17, 2022, successful test run was a ***motorless/black start*** of the Peregrine II 5.5:1 pressure ratio Turbopump using stored energy from PTT's Thermal Energy Storage System. PTT's first of kind Turbopump is the key component in Peregrine's patented modular, high efficiency, high power density, energy conversion cycle.

PTT's breakthrough energy technology has applications to nuclear, concentrated solar thermal, biomass, and fossil energy conversion systems.

The November 16 successful test run achieved these notable breakthroughs:

- Successful Operation of Gen. II Peregrine sCO2 Turbopump. (PTT's Gen I has over 500 hours of operation and testing at Sandia National Laboratories)
- Successful quick-stop (2 seconds) shutdown of sCO2 system. Prior shutdown testing was 1 minute 50 seconds.
- Successful demonstration of early-stage control and data collection system.
- Commencement of the Company's Proof of Concept (POC) Testing Campaign validating its commercial level components and system

PTT test system is the highest performance sCO2 engine loop currently existing in the world.

The testing campaign is the final step in preparing the Company's advanced technology for Commercial demonstration in an active operating environment. This follows more than 3 years and 500 hours of successful testing of it sCO2 engine at Sandia National Laboratories' Brayton Test Laboratory in Albuquerque, NM.

The test was also the WORLD'S FIRST start and run of a sCO2 Brayton Cycle Turbine powered from Miscibility Gap Alloy (phase change) thermal energy storage. PTT has received awards from the Air Force Research Lab (AFRL), the Office of Naval Research (ONR), and the Maine Technology Institute (MTI) in support of its leading development of Brayton cycle sCO2 gas turbine development for energy conversion.

The Company has developed strong collaborations and working relationships with key suppliers that supplement the Company's own resources.

About Peregrine Turbine Technologies:
PTT's senior leadership team collectively has over 250 years of successful, demonstrated management of complex technologies, systems, products, and operations with Companies ranging from GE, Rolls Royce, Pratt and Whitney, Sundstrand, and Solar Turbines to Allied Signal, General Signal, Great Northern Paper Company, and American Capital.

Peregrine's breakthrough technologies are changing the landscape of power generation and long duration energy storage. The Company is uniquely positioned to meet the demands of future platforms for advances in clean energy storage and conversion with a total energy management system.

Peregrine's novel closed-cycle turbine engine and energy storage technology will demonstrate the world's first economically viable alternative to grid-scale energy storage using Lithium Ion batteries. Its' long duration energy storage (LDES) has 2X the life and is 1/3

the annualized cost of equivalent, current technology, Li-ion battery storage systems and without the toxic materials and associated reprocessing costs..

Peregrine is bringing clean, affordable, sustainable energy solutions to the energy disadvantaged and emerging societies as well as making way for net-zero carbon goals to become reality for larger scale grids.

Learn more at www.peregrineturbine.com