TAE Technologies' Fusion Machine Exceeds Prior Operations and Performance Levels in Record Time

World's most powerful field-reversed configuration plasma generator steps company closer to delivering Friendly Fusion

Foothill Ranch, CA – February 6, 2018 – TAE Technologies, Inc. (formerly Tri Alpha Energy), the world's largest and most advanced private fusion company, has announced that its proprietary beam-driven field-reversed configuration (FRC) plasma generator, "Norman," surpassed a new technical milestone, bringing the company closer to the reality of commercial fusion power. This latest achievement marks a significant step in the company's mission to create a global energy revolution with clean, safe, sustainable fusion energy.

Norman, the $100MM National Laboratory-scale device named for company founder Dr. Norman Rostoker, was unveiled in May 2017 and quickly reached first plasma in June 2017. After over 4,000 experiments to date, Norman has now exceeded the capabilities and performance of the company's previous FRC plasma generator, C-2U, and sets a new company record for plasma temperature.

These efforts track with the company's plans and scientific requirements for a successful fusion reaction, where plasma must be hot enough to enable forceful enough collisions to cause fusion, and sustain itself long enough to harness the power at will (coined the Hot Enough/Long Enough or HE/LE milestone). After over 100,000 experiments, TAE made breakthroughs in plasma confinement and stability, proving the "Long Enough" component in 2015. A year later, the company began building its fifth-generation device, the more powerful and sophisticated Norman, to further test plasma temperature increases in pursuit of "Hot Enough."

"This announcement is an important milestone on our quest to deliver world-changing clean fusion energy to help combat climate change and improve the quality of life for people globally," said company President and CTO, Michl Binderbauer. "This achievement further validates the robustness of TAE's underlying science and unique pathway."

Thanks to TAE's previous insights from C-2U, and the company's longstanding collaboration with Google to apply machine learning to advance plasma physics, Norman's plasma was hotter from the outset.

"It is profound to see TAE's scientific innovations bear out in Norman's performance," said TAE Technologies CEO, Dr. Steven Specker. "Our remarkable progress signals the reality of a future powered by fusion energy, and hydrogen-boron is as safe and clean a fuel source as you can find. It's a win-win for us all."

TAE Technologies' revolutionary approach to fusion combines advanced accelerator and plasma physics, and uses abundant, non-radioactive hydrogen-boron (pB-11) as a fuel source. The proprietary magnetic beam-driven FRC technology injects high-energy hydrogen atoms into the plasma to make the system more stable and better confined. This solution is compact and energy efficient, yielding a practical commercial power plant that is economically competitive with other energy technologies and provides continuous baseload power generation.

Having now achieved this performance level with Norman, the company will continue working toward the "Hot Enough" milestone, edging closer to identifying the optimal conditions for fusion energy generation.

For more information on TAE Technologies, visit tae.com.

####

ABOUT TAE TECHNOLOGIES

TAE Technologies is leveraging proprietary science and engineering to tackle the world's biggest challenges. Our core mission is to create a new source of clean energy – one that's powered by nature's own processes and produces no harmful byproducts. It's what we call Friendly Fusion. Our groundbreaking work has resulted in industry-wide advances in accelerator and plasma physics, and acted as a catalyst for adjacent innovations in healthcare, transportation and power management. With 20 years of focused research, TAE Technologies is on a purposeful path to commercial fusion energy and pioneering sustainable solutions for a better tomorrow.