Longview Fusion Energy Systems

Longview Fusion Energy Systems Announces Path to Laser Fusion Power

Launches Commercialization Plan to Support First-of-Its-Kind Clean Power Plant

[Orinda, Ca] – December 13, 2022 – Longview Fusion Energy Systems, Inc. (Longview), based on the historic achievement of fusion energy gain announced earlier today by the U.S. Department of Energy (DOE), announced plans to build the world's first laser fusion power plant.

U.S. Secretary of Energy Jennifer M. Granholm reported that the world's first and only demonstration of fusion energy breakeven, more energy out than energy in, was achieved at the National Ignition Facility (NIF) at Lawrence Livermore National Laboratory in Livermore, California. The NIF, the world's most energetic laser, squeezes together a type of hydrogen so that it becomes 100 times denser than lead and at a temperature of 100 million degrees, bringing star power to earth.

Longview's power plants will combine the NIF's laser fusion breakthrough with modern, efficient lasers and a patented design to replicate these conditions several hundred times a minute – similar to the repetitive pulses in a car engine but delivering over one million horsepower. These power plants will provide carbon-free, safe, economical, and sustainable energy at a scale that can power a city's electricity and drive industrial production of the materials needed for today's world – from steel to fertilizer to hydrogen fuel. With plant groundbreaking planned in five years, this revolutionary energy source will play a significant role in meeting the global growing need for clean energy.

The Longview team, spearheaded by Dr. Edward Moses and Ms. Valerie Roberts, led the successful delivery of the NIF fusion facility. Dr. Moses is a global leader in fusion energy with more than four decades of experience in engineering, physics, fusion technologies, and laser science. Ms. Roberts has over three decades of experience advising Fortune 500 executives and government clients across a range of strategic and operational matters. To deliver the world's first laser fusion power plant, Dr. Moses and Ms. Roberts have assembled a powerhouse team of fusion scientists, engineers, and business leaders, who were instrumental in the development of the breakthrough technology since its inception. Longview has been working with a broad partnership of U.S. industry, utilities, academia, national labs, and strategic investors over the past 18 months to design a power plant based on the physics that has now been proven at the NIF.

Dr. Moses said, "Longview has been working quietly in anticipation of this day – which is historic by all measures. We knew that when breakeven was achieved, it would be too late to begin to plan for full-scale commercialization. Today is the 'day after,' and we are here to ensure the world will have a carbon-free option in time to make a difference."

“The Longview power plant is based on the world’s only experimental demonstration of fusion burn,” said Ms. Roberts. “It can use materials and products available today, cutting decades off the commercialization process. This reflects Longview’s ethos to deliver energy justice across the world’s communities, addressing the biggest challenge of our time – climate change.”

In public remarks today, Secretary Granholm noted, “We need the private sector to get in the game …[President Biden] has a decadal vision to a commercial fusion reactor within 10 years, so we’ve got to get to work…This demonstrates it can be done. That threshold being crossed allows them to start working on better lasers, better capsules, etc. – the things that allow it to be modularized and taken to commercial scale….This is a great day [that] will go down in the history books.”

About Dr. Edward Moses
Dr. Edward Moses has over 40 years of experience working in engineering, physics, fusion technologies, and laser science, including almost 30 years at Lawrence Livermore National Laboratory (LLNL), as well as playing major roles in astronomical and other high technology and science efforts. He has brought together academia, national and international laboratories, commercial companies, utility entities and other interests to enable the maturation of the science, engineering and technology needed to understand and develop fusion science, fusion technologies for fusion energy and other applications.

About Valerie Roberts
Valerie Roberts is a seasoned public company executive and board member. She has over three decades of experience advising Fortune 500 executives and government clients across a broad spectrum of matters including transformational initiatives, organic and acquisitive growth strategies, divestitures, investments in information technology and targeted investor relations activity.

About Longview Fusion Energy Systems
Our mission is to revolutionize the move to a carbon-neutral economy by bringing laser fusion energy to the global grid infrastructure in the next decade. For additional information, please visit www.longviewfusion.com

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