



GE Vernova selected by the U.S. Department of Energy to develop AI Assistant for permitting and trainings for hydrogen deployment

- Award supports a three-year, \$1 million project to develop an AI Assistant trained for safe hydrogen (H₂) handling and permitting and trainings focused on the safety for hydrogen development;
- GE Vernova will lead a diverse project team named “H2Net”, including Clemson University, and Roper Mountain Science Center;
- These US federal investments in hydrogen can contribute to a more sustainable future with less carbon emissions, while boosting economic opportunities across the country

GREENVILLE, USA (September 26, 2024) — GE Vernova Inc. (NYSE: GEV) announced today that GE Vernova was selected for award negotiations by the U.S. Department Energy’s (DOE) [Hydrogen and Fuel Cell Technologies Office](#) (HFTO) to lead a project aiming to enable permitting and safety for hydrogen deployment. The project has the objective to identify the primary challenges to siting, permitting, and installation across the value chain from hydrogen production through end-use. GE Vernova will lead a diverse project team named “H2Net”, including Clemson University, and Roper Mountain Science Center based in Greenville, SC, USA. GE Vernova will enter award negotiations valued in \$1 million in US federal funding with the DOE to finalize the terms and the scope of the project.

As part of this program, H2Net is expected to develop an AI Assistant that is trained specifically on the relevant, critical documents for safe H₂ handling and permitting. The AI Assistant, called **HySAGE**, Hydrogen Smart Assistant for Governance Execution, will be validated against requirements and lessons learned at GE Vernova’s Gas Turbine Manufacturing and Technology Center in Greenville, SC. HySAGE will aim to enable state-of-the-art modeling capability and flexibility for incorporating all necessary codes and standards and environmental scenarios to increase the versatility and accuracy of the tool.

“These investments in clean hydrogen showcase the Administration’s commitment to making clean energy a *win-win* for all Americans—by contributing to a sustainable zero-carbon future, while boosting economic opportunities across the country,” said **U.S. Secretary of Energy Jennifer M. Granholm**.

“These projects will work hand in hand with historic investments in the Hydrogen Hubs and electrolysis technologies to accelerate progress towards a clean hydrogen economy that will deliver good-paying, high-quality jobs and accelerate a renaissance of American manufacturing.”



“The success of our regional clean hydrogen hubs—and the national clean hydrogen strategy—hinges in large part on advances in technology that will grow clean hydrogen’s economic potential,” noted **Dr. Sunita Satyapal, director of the U.S. Department of Energy’s (DOE’s) Hydrogen and Fuel Cell Technologies Office** and coordinator of the DOE Hydrogen Program. “At the same time, we need to ensure that siting and permitting are done in the safest, most efficient way possible as hydrogen infrastructure expands across domestic markets. By identifying ways to address siting and permitting challenges, these projects will complement other large-scale investments in clean hydrogen by the Biden-Harris administration and will play a vital role in contributing to our nation’s clean energy future.”

“We are proud to be a part of the DOE’s commitments to reduce CO₂ emissions and accelerate the progress towards a more sustainable economy with less carbon emissions,” said **[Jeremie Wetherby](#) Carbon Solutions Leader at GE Vernova**. “Our project proposes to reap the benefits from artificial intelligence and explore new and innovative ways to handle hydrogen deployment safely, while investing in trainings for the community and our workforce. We are grateful for the collaboration with Clemson University and Roper Mountain Science Center, which will bring their expertise respectively in the development of AI applications and in K-12 science curriculum and exhibit development.

“We are excited to collaborate with GE Vernova on this DOE project,” said **Xiaoyong (Brian) Yuan, Assistant Professor, Holcombe Department of Electrical and Computer Engineering at Clemson University**. “Leveraging our expertise in AI and large language models, we will work together to develop innovative solutions that overcome technical and operational barriers to the safe deployment of hydrogen technologies.”

“Roper Mountain is thrilled to share the innovative advancements in hydrogen energy with the next generation of our workforce through hands-on exhibits, curriculum, and instruction,” said **Michael Weeks, Director of Roper Mountain Science Center**. “This investment will help us to build and to educate a more sustainable future.”

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Notes to editors

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About GE Vernova:

GE Vernova (NYSE: GEV) is purpose-built global energy company that includes Power, Wind, and Electrification segments and is supported by its accelerator businesses. Building on over 130 years of experience tackling the world’s challenges, GE Vernova is uniquely positioned to help lead the energy transition by continuing to electrify the world while simultaneously working to decarbonize it. GE Vernova helps customers power economies and deliver electricity that is vital to health, safety, security,



and improved quality of life. GE Vernova is headquartered in Cambridge, Massachusetts, U.S., with more than 75,000 employees across 100+ countries around the world. Supported by the Company’s purpose, The Energy to Change the World, GE Vernova technology helps deliver a more affordable, reliable, sustainable, and secure energy future.

GE Vernova’s Gas Power business engineers advanced, efficient natural gas-powered technologies and services, along with decarbonization solutions that aim to help electrify a lower carbon future. It is a global leader in gas turbines and gas power plant technologies and services with the industry’s largest installed base of approximately 7,000 gas turbines.

GE Vernova’s mission is embedded in its name – it retains its legacy, “GE,” as an enduring and hard-earned badge of quality and ingenuity. “Ver” / “verde” signal Earth’s verdant and lush ecosystems. “Nova,” from the Latin “novus,” nods to a new, innovative era of lower carbon energy. Learn more: [GE Vernova](#) and [LinkedIn](#).

Forward Looking Statements:

This document contains forward-looking statements – that is, statements related to future events that by their nature address matters that are, to different degrees, uncertain. These forward-looking statements often address GE Vernova’s expected future business and financial performance and financial condition, and the expected performance of its products, the impact of its services and the results they may generate or produce, and often contain words such as “expect,” “anticipate,” “intend,” “plan,” “believe,” “seek,” “see,” “will,” “would,” “estimate,” “forecast,” “target,” “preliminary,” or “range.” Forward-looking statements by their nature address matters that are, to different degrees, uncertain, such as statements about planned and potential transactions, investments or projects and their expected results and the impacts of macroeconomic and market conditions and volatility on the Company’s business operations, financial results and financial position and on the global supply chain and world economy.

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