

GE Vernova & Energy Systems Group shortlisted to increase energy resilience at DoD installations using advanced geothermal & hydrogen solution

- Proven energy companies are collaborating with startups to bring advanced geothermal technology to utility scale, with the goal of supplying U.S. military bases with reliable and cost-effective electricity, even during grid outages
- Program will explore how to tap into America's abundant geothermal energy supply to increase national security
- Solution could provide utility-scale, 5-megawatt energy resilience, 24-7 at about 50 DoD sites in the western U.S. and along the western Gulf of America

NISKAYUNA, NY (March 12, 2025) – GE Vernova Inc. (NYSE: GEV) in collaboration with Energy System Group (ESG), Sage Geosystems (Sage), The Energy & Geoscience Institute at The University of Utah (EGI), announced that they were selected by U.S. Air Force and the Department of Defense's Chief Digital and Artificial Intelligence Office (CDAO) to explore how to tap into America's abundant geothermal energy supply to increase our national security.

This team, which has achieved "Awardable" status, is led by ESG. With over 30 years of experience working on military bases to provide power security and advanced mission readiness, Energy Systems Group will take the lead in designing power plants at Department of Defense (DoD) installations and developing a robust business model for each project. The team is strengthened by GE Vernova's contributions from its Advanced Research, Power Conversion & Storage, and Grid Solutions businesses, which bring cutting-edge power conversion and microgrid technology, as well as battery energy storage systems integration (BESS).



The team is also supported by the Energy & Geoscience Institute at The University of Utah (EGI), which brings over 30 years of experience in geothermal resource exploration and characterization. Additionally, Sage will contribute its patented, proven pressure geothermal system, which operates like a multi-cylinder engine, utilizing two wells in an injection and production pattern to maximize efficiency and sustainability.

With this expertise, the team is now poised to explore the development of utility-scale geothermal power plants in the United States and abroad, with the goal of supplying U.S. military bases with reliable and cost-effective electricity, even during grid outages. This team was selected through the CDAO's innovative solicitation process known as the Tradewinds Solutions Marketplace, which is designed to accelerate the procurement and adoption of mission critical technologies, such as Artificial Intelligence, Machine Learning, and resilient energy technologies.

"The U.S. Air Force leveraged the Tradewinds solicitation process to quickly collaborate with innovative American companies to build resilient, next-generation geothermal technologies at our bases, using private capital instead of taxpayer dollars," said **Mr. Kirk Phillips, Director, Air Force Office of Energy Assurance.**"

GE Vernova's video, "GEO2X," or "Advanced Geothermal Energy-to-Everything," accessible only by government customers on the Tradewinds Solutions Marketplace, presents a solution that could provide 5-megawatt energy resilience 24-7 at about 50 DoD sites along the western Gulf of America and to the west of 101 degrees longitude. The solution includes geothermal assessment expertise (EGI and Sage), drilling (Sage), power conversion, delivery, microgrid design and control (GE Vernova), hydrogen generation and storage (GE Vernova), and power generation and project development (Energy System Group).

"We are excited to play a role in helping unleash American's energy dominance with secure, plentiful, geothermal energy," **Steve Smith, Energy Systems Group's V.P. of Federal Business,** "We are honored to lead this innovative team that brings a wide range of technology and experience to help the DoD safeguard



mission-critical operations.”

This team was recognized among a competitive field of applicants to the Tradewinds Solutions Marketplace whose solutions demonstrated innovation, scalability, and potential impact on DoD missions. Government customers interested in viewing the video solution can create a Tradewinds Solutions Marketplace account at tradewindAI.com.

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Photo information

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Photo by Staff Sgt. Alexander Schriener_ | 155th Air Refueling Wing, Nebraska Air National Guard

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"The appearance of U.S. Department of Defense (DoD) visual information does not imply or constitute DoD endorsement."

Source: Pages 46-47 of DoD Instruction 5410.19 Volume 1, "Community Outreach Activities: Policy Overview and Evaluation", September 29, 2021.

About Energy Systems Group

Energy Systems Group (ESG) is a leading provider of performance-driven energy and infrastructure solutions nationwide. We design, build, and guarantee solutions that improve the reliability, efficiency, and lifespan of critical facilities in the education, government, healthcare, commercial, and industrial sectors. With a commitment to delivering reliable and proven solutions, Energy Systems Group takes a comprehensive approach to facility transformation. Visit energysystemsgroup.com to learn more.

About Sage Geosystems

Sage Geosystems is a leader in the next-generation geothermal industry, pioneering the use of Pressure Geothermal. Pressure Geothermal leverages both the heat and the pressure of the earth to enable three applications: energy storage,



power generation and district heating. Sage is enabling geothermal to be deployable globally. For more information, visit www.sagegeosystems.com

About The Energy & Geoscience Institute at The University of Utah

The Energy & Geoscience Institute (EGI) is a multidisciplinary energy institute at the University of Utah. Over its 50-plus year existence, EGI has performed groundbreaking petroleum and geothermal exploration research around the world and has worked on innovative geothermal technologies. EGI manages FORGE (Frontier Observatory for Research in Geothermal Energy), a U.S. Department of Energy flagship project.

About the Tradewinds Solutions Marketplace

The Tradewinds Solutions Marketplace is a digital repository of post-competition, readily awardable pitch videos that address the Department of Defense's (DoD) most significant challenges in the Artificial Intelligence/Machine Learning (AI/ML), data, and analytics space. All awardable solutions have been assessed through complex scoring rubrics and competitive procedures and are available to Government customers with a Marketplace account. Government customers can create an account at www.tradewindai.com. Tradewinds is housed in the DoD's Chief Digital Artificial Intelligence Office. For more information or media requests, contact: Success@tradewindai.com

About the Air Force Office of Energy Assurance

The Air Force Office of Energy Assurance (AF OEA), a directorate of the Air Force Civil Engineer Center (AFCEC), develops energy solutions that close energy resilience gaps and strengthen our nation's Air Force and Space Force installations at home and abroad. By leveraging the expertise of the energy community, AF OEA builds tailored energy solutions for each installation that are resilient, innovative, and cost-effective. For more information visit: <https://www.afcec.af.mil/energy>

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About GE Vernova

GE Vernova Inc. (NYSE: GEV) is a purpose-built global energy company that includes Power, Electrification and Wind 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 approximately 85,000 employees across approximately 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 **Grid Solutions** business electrifies the world with advanced grid technologies and systems, enabling power transmission and distribution across the power grid, and supporting a decarbonized and secured energy transition.

GE Vernova's **Power Conversion & Storage** business combines advanced energy conversion and storage systems to meet the electrification needs of utilities and industries. With a focus on power stability, energy storage and industrial electrification solutions, Power Conversion & Storage empowers customers by addressing their most complex electrification challenges and accelerating their transition to a sustainable, decarbonized future.

GE Vernova's **Advanced Research** business is an innovation powerhouse, operating at the intersection of science and creativity to turn cutting edge research



into impactful realities. Advanced Research collaborates with GE Vernova's businesses across a broad range of technical disciplines to accelerate the energy transition.

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