

GE Vernova marks significant milestone, commissioning 100th HA gas turbine globally with more than 60 additional units on order

- HA technology can play a crucial role in the global energy transition facilitating coal-to gas switching and providing the necessary flexible power to integrate greater levels of variable renewable energy •
- GE Vernova’s 100th HA gas turbine, a 7HA.03, the world’s largest, most efficient, and flexible gas turbine with the lowest cost conversion of gas to electricity for 60-hertz power plant operators, is installed at KOSPO’s Shinsejong Combined Cycle Power Plant
- Record units commissioned today with dozens more on order can lead to current and future services and maintenance contracts for decades to come

SEJONG, SOUTH KOREA (July 15, 2024) – GE Vernova Inc. (NYSE: GEV) today announced Korea Southern Power Co, Ltd. (KOSPO)’s Shinsejong Combined Cycle Power Plant achieved the start of operation in Nuri-ri, Yeongi-myon, Sejong Multifunctional Administrative City, the administrative capital of South Korea. The plant, powered by GE Vernova’s 7HA.03 gas turbine, marks the company’s 100th HA unit commissioned across the globe, and the first 7HA.03 gas turbine in South Korea.

With the highest number of H-Class units ordered, GE Vernova’s HA gas turbines have accumulated more than 2.5 million commercial operating hours continuing to be the fastest growing fleet in the heavy-duty gas turbine H-Class segment. The fleet boasts an installed capacity of more than 53 gigawatts (GW) of power, the equivalent capacity needed to power nearly 40 million American homes.

“Demand for electricity is on the rise, and we expect it to continue to accelerate,” said [Eric Gray](#), **CEO at GE Vernova’s Gas Power business**. “Highly efficient HA gas power plants can play a crucial role in balancing energy transition commitments with electricity reliability. Many HA combined cycle power plants facilitate the coal-to gas transition and provide the necessary power to balance the variable nature of renewables, helping to ensure energy system reliability and grid stability.”

In addition to benefitting customers and supporting the energy transition, the growing fleet of operating HA gas turbines can provide significant services backlog for GE Vernova over the long-term via maintenance and upgrade opportunities.

HA gas turbines can save over 3.3 metric tonnes of CO₂ emissions per year, per unit compared to an average coal-fired plant of the same size. This is equivalent to removing 680,000 cars off the road for every HA unit deployed. In addition, GE Vernova simulated that H-class units in South Korea could reduce carbon emission intensity of the fossil fleet per kilowatt hour more than three fold over current levels if coal plants were retired and this newer, advanced technology was deployed in country.

GE Vernova HA class combined cycle power plants emit approximately [50-60 percent less](#) CO₂ compared to a typical coal-fired power plant of the same size, significantly lower nitrous oxides and particulate matter, no mercury, and essentially no sulfur oxides.

Energy combustion systems are a key component of GE Vernova’s HA gas turbines and modern combustion technologies can increase efficiency and reduce emissions. As a leader in combustion technology, GE Vernova developed the DLN 2.6e combustion system with its advanced premixer technology, installed in GE Vernova 60Hz H-class turbines, offering a step change in performance, emissions and fuel flexibility. This technology can enable the 7HA.03 gas turbines installed at Shinsejong to generate power with lower NO_x emissions, three parts per million of NO_x at the main stack with efficient flue gas treatment system.

With South Korea’s power generation very reliant on heavy fossil fuels today (with coal and oil covering nearly 60% of power needs, according to [IEA](#) estimates), gas power can play a crucial role in facilitating its transition to a lower carbon future. The Shinsejong plant will generate power to sell at Korea Power Exchange and heat to supply district heating to Sejong City. This will help KOSPO meet the growing demand for heat, air conditioning, and electricity with increased efficiency. in alignment with the country’s commitment to moving the country to being carbon neutral by 2050.

“We’re thrilled to celebrate with KOSPO, and with all our customers and employees, this latest milestone for our proven HA fleet, which is helping power plant operators increase efficiency, retire coal-fired facilities to reduce emissions, and integrate greater levels of renewable energy globally,” commented Gray. “Beyond the proven benefits of the HA fleet, multi-decade services and maintenance contracts can ensure continued performance enhancements and efficient operations for power plant customers.”

In a related milestone, in April, GE Vernova celebrated the production of the 2000th gas turbine manufactured at its site in Belfort, France, followed by last week’s announcement of the [first HA turbine completed in Saudi Arabia](#) at GE Saudi Advanced Turbines (GESAT) facility – a joint venture between Dussur and GE Vernova.

GE Vernova’s H-Class combined cycle power plant is one of the most responsive and flexible in the industry, enabling grid operators to dispatch power quickly, complementing intermittent renewable sources. The fleet is highly fuel flexible and able to operate on a variety of fuels, including blends of hydrogen and natural gas that may enable further emissions reduction in the future. In addition, H-class combined cycle plants can be retrofitted with a carbon capture system that can reduce CO2 emissions by up to 95 percent.

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Notes to editors

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.

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](#).

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Media inquiries

Laura Aresi

GE Vernova | Media Relations Leader, Power
laura.aresi@ge.com

Zatalini Zulkipli

GE Vernova | Regional Communications Leader, Asia
zatalini.zulkipli@ge.com
+60 17 224 5752