GE-Powered Guernsey Power Station Delivers 1.8 GW of Electricity to Help Coal-to-Gas Transition in Ohio

- *Guernsey Power Station adds over 1,800 megawatts (MW) of electricity to the grid in PJM Energy Market, the equivalent capacity needed to power approximately 1.4 million US homes*
- *In a single shaft combined cycle configuration, the plant aims to provide efficient, flexible and reliable power needed to support grid stability and energy transition in Ohio*
- *GE delivered H-class combined cycle plant equipment and will provide digital solutions and multi-year services for the facility for twenty years*

ATLANTA—June 7, 2023—GE Vernova's Gas Power business (NYSE: GE) announced today the start of commercial operation of Caithness Energy's 1,875-megawatt Guernsey Power Station in Guernsey County, in Southeastern Ohio, in the heart of the state's Utica and Marcellus shale gas development area. Powered by GE's HA combined cycle equipment, Guernsey Power Station can deliver the equivalent electricity needed to power approximately 1.4 million US homes within the PJM Energy Market, which coordinates the movement of wholesale electricity in all or parts of 13 states and the District of Columbia, including Ohio. In a recent paper, Energy Transition in PJM: Resource Retirements, Replacements & Risks, PJM reported coal fired generation retirements might outpace new entry; at the same time, load will increase, which can create concerns over resource adequacy and grid stability in the region.

"In 2022, coal-fired plant retirements accounted for approximately 89% of retired capacity in the PJM region and as more and more coal fired plants are retired, the need for thermal resources and the essential reliable and flexible power they provide is crucial for grid stability and to help meet the increasing demand for power," said **Ross D. Ain, President of Caithness Energy,** "GE's gas turbines are among the largest and most efficient gas turbines in the world, and operating flexibility may be considered as the key feature of Guernsey plant, powered by

three GE 7HA.02 gas turbines in a single shaft combined cycle configuration, the largest of this kind in the United States. We trust GE's equipment will help us turn current energy transition challenges into the opportunity to drive carbon emissions reduction in the energy sector through the deployment of new flexible, much more efficient, and cleaner gas-fired plants to substitute for older, less efficient units."

The plant is equipped with three 7HA.02 gas turbines powering three W84 generators, three STF-A650 steam turbines and three GE triple pressure with reheat Heat Recovery Steam Generators (HRSG). It uses combined-cycle technology consisting of both natural gas-powered turbines and steam powered turbines. The combined-cycle configuration captures the excess heat generated by the gas turbines and, rather than releasing that heat into the air, uses the excess heat to make steam to power the steam turbines, while generating significantly more electricity – up to 50 percent more – from the same amount of fuel as a simple cycle plant.

GE will also service the facility under a multi-year services agreement for 20 years and provide cloud-based predictive analytics through GE Digital's Asset Performance Management (APM) software Reliability software powered by SmartSignal. APM Reliability will help predict potential asset failures and reduce unplanned downtime, while improving power plant productivity and reliability.

"We are proud that our advanced HA combined cycle equipment started to provide efficient, flexible and reliable electricity at Guernsey Power Station," said **Dave Ross**, **CEO of GE Gas Power in the Americas**. "Gas power plays a crucial role in the energy transition, helping to balance the variable nature of renewables and ensuring system reliability. Our 7HA.02 gas turbines, which can burn up to 20% hydrogen with plans to transition to 100% hydrogen over the next decade, are a highly efficient energy solution to help power plant operators, like Caithness Energy, to advance their carbon emissions reduction goals. In addition, our services and digital solutions will be crucial to improve Guersey plant's performance and availability."

7HA gas turbine features and benefits

GE’s H-Class gas turbine technology is among the most responsive and flexible in the industry. It has also set combined cycle efficiency records at both 50 Hz and at 60 Hz. The economies of scale created by the 7HA gas turbine, combined with its 64% combined-cycle efficiency, enable the cost-effective conversion of fuel to electricity to help power plant operators meet increasingly dynamic power demands.

The 7HA suite of gas turbines’ flexibility enables increased dispatch and ancillary revenue, while enhanced fuel flexibility accommodates a wide range of gaseous fuels (shale gas, high ethane, H2) and liquid fuels (#2 diesel, crude oils). The 7HA gas turbine ramps up to full load in 10 minutes and features a novel configuration that supports simplified installation and maintenance.

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About Caithness Energy

Caithness Energy, L.L.C. (“Caithness”) is a privately-held Independent Power Producer specializing in the development, acquisition, operation, and management of renewable energy and natural gas development projects. Learn more at: www.caithnessenergy.com.

About GE Gas Power

GE Gas Power is a world leader in natural gas power technology, services, and solutions. Through relentless innovation and continuous collaboration with our customers, we are providing more advanced, cleaner and efficient power that people depend on today and building the energy technologies of the future. With the world’s largest installed base of gas turbines and more than 670 million operating hours across GE’s installed fleet, we offer advanced technology and a level of experience that’s unmatched in the industry to build, operate, and maintain leading gas power plants. For more information, please visit www.ge.com/power/gas and follow GE’s gas power businesses on Twitter @GE_Power and on LinkedIn at GE Power.

GE Gas Power is part of GE Vernova, a dynamic accelerator comprised of our Power, Renewable Energy, Digital and Energy Financial Services businesses, focused on supporting customers' transformations during the global energy transition.

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