

Houston, August 13, 2019

Siemens performs first large gas turbine exchange in the U.S.

- **Brownfield Engine Exchange (BEX) delivers cleaner energy, long-term reliability, improved efficiency and more powerful performance**
- **Making Energy Greener is one of Siemens' continuing core focus areas as the global energy landscape evolves and changes**
- **Over 30 engine exchange projects worldwide to date with several recent new orders**

Siemens Gas and Power is focused on helping customers navigate the world's most pressing energy problems, both for today and tomorrow. Essential applications include providing products, solutions and services that make fossil energy greener. A recent example is a project in Alabama where Siemens is has completed its first large gas turbine section exchange in the U.S. -- delivering on that commitment. In this way Siemens is helping make energy greener and more sustainable in an evolving energy landscape.

Earlier this year, Siemens embarked on a project to replace the gas turbine section (V84.2) at PowerSouth's McWilliams power plant in Covington County, Alabama with a newer, more efficient section that is providing numerous benefits. The newer SGT6-2000E is known for its reliable performance and, in this case, was the perfect, and economically viable, alternative to simply continuing to replace parts and provide maintenance upgrades at regularly scheduled intervals. The McWilliams plant is now equipped with Siemens' innovative Si3D blades, which are characterized by an aerodynamic design with optimal efficiency.

After the exchange project, the McWilliams plant is now producing 114 megawatts (MW) of cleaner energy, up from an average of 102 MW previously, due principally to improvements in gross simple cycle efficiency from approximately 31 percent to

approximately 35 percent. In addition, NOx emissions have decreased from 13-16 parts per million (ppm @ 15 percent O2) to 10 ppm.

“This is a terrific example of how ingenuity, technical expertise and a commitment to making energy cleaner come together to provide measurable benefits to customers and consumers alike,” said Vinod Philip, CEO Service Power Generation at Siemens Gas and Power. “As the world pays closer attention to how energy is produced and consumed, it is incumbent upon companies like Siemens to help our customers address these concerns with innovative, cleaner energy solutions such as the Brownfield Engine Exchange program.”

There is a need worldwide for BEX programs as energy efficiency is essential in reaching climate goals. For many turbines in operation, BEX offers a cost-effective and fast solution to traditional maintenance and can increase efficiency and cut greenhouse gas emissions at the same time.

Another trendsetting example for making fossil energy greener is the Braskem project in Brazil. In this modernization project two SGT-600 gas turbines are co-fired up to 60 percent with hydrogen. This will result in greater efficiency for the production process of the industrial unit of the Petrochemical Complex and an emission reduction.

Siemens is a leader in the drive to a decarbonized energy system and making energy greener is a continuing core focus area as renewables and low-carbon fossil energy pave the way into a sustainable future. Under this umbrella, Siemens continues to innovate in sustainable energy solutions such as low and no carbon fuels, Power-to-X, grid stability, battery storage, energy efficiency, fuel flexibility and more.

Decarbonization is a goal shared by Siemens and its customers in an effort to reach a greener future. Siemens has committed to be carbon neutral by 2030.

This press release and a press picture are available at <https://sie.ag/2GVsfvW>

For further information on Siemens Service for Power Generation, visit

<https://new.siemens.com/global/en/products/energy/services.html>

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Siemens AG (Berlin and Munich) is a global technology powerhouse that has stood for engineering excellence, innovation, quality, reliability and internationality for more than 170 years. The company is active around the globe, focusing on the areas of power generation and distribution, intelligent infrastructure for buildings and distributed energy systems, and automation and digitalization in the process and manufacturing industries. Through the separately managed company Siemens Mobility, a leading supplier of smart mobility solutions for rail and road transport, Siemens is shaping the world market for passenger and freight services. Due to its majority stakes in the publicly listed companies Siemens Healthineers AG and Siemens Gamesa Renewable Energy, Siemens is also a world-leading supplier of medical technology and digital healthcare services as well as environmentally friendly solutions for onshore and offshore wind power generation. In fiscal 2018, which ended on September 30, 2018, Siemens generated revenue of €83.0 billion and net income of €6.1 billion. At the end of September 2018, the company had around 379,000 employees worldwide. Further information is available on the Internet at www.siemens.com.