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**FUEL TECH ANNOUNCES FIRST OPERATIONAL DEPLOYMENT  
OF GRADUATED STRAIGHTENING GRID**

*-- Reflects Expanded Capabilities in SCR-Related Design --*

**WARRENVILLE, Ill., Jan. 30, 2009** – Fuel Tech, Inc. (NASDAQ: FTEK), a world leader in advanced engineering solutions for the optimization of combustion systems in utility and industrial applications, today announced that it was highly successful in the first operational deployment of its patent-pending Graduated Straightening Grid (GSG), which was developed as part of a broad-based initiative at the St. Johns River Power Park in Jacksonville, Florida, where the first of two Selective Catalytic Reduction (SCR) systems for nitrogen oxide (NO<sub>x</sub>) control recently commenced operation on two 670 megawatt solid fuel boilers.

Fuel Tech's newly expanded capabilities in SCR-related design, acquired in connection with the asset acquisitions of Tackticks, LLC and FlowTack, LLC, is reflected in the multitude of assignments completed at this client facility, including: consulting on ductwork design; designing flow distribution devices such as turning vanes, a static mixer and the GSG; designing the Large Particle Ash (LPA) collection screen and the ammonia injection grid (AIG); designing the ammonia injection upstream of the electrostatic precipitators for better fly ash removal; and performing computational fluid dynamics (CFD) and experimental models to validate these designs. In addition, project scope included AIG tuning and participation in both the selection of the catalyst supplier and in the catalyst pilot program, which ran for over 2,000 hours.

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Of particular interest is the development of the GSG, which dramatically improves flue gas velocity distributions without increasing cost or complexity. Using an array of flat blades that are tilted at a precisely calculated angle, this device brings a new level of flow distribution control across the catalyst of an SCR system, where particle direction, velocity and temperature are critical for catalyst performance. Based on CFD and physical models, the GSG is positioned to redirect flue gases from a horizontal duct into the vertical downward flow of the SCR reactor while minimizing the angle at which the flue gas particles strike the catalyst.

This innovative design allows for higher flue gas velocity, resulting in improved operating and financial performance for the SCR unit. Expected benefits include longer catalyst life, which reduces both catalyst cost and unit downtime for catalyst replacement. In addition, higher flue gas velocities help keep the unit clean, reducing the potential for undesirable catalyst pluggage.

At the client facility, GSG technology significantly reduced the time required to tune the AIG, which is used to introduce ammonia reagent to the SCR via injection lances. Of the 42 test points, 39 were already within the required limits during the base line test. Consequently, the AIG required only one set of adjustments to the valve settings before the client was able to run the SCR with a NOx emission of 0.05 lbs/MMBTU, compared with an SCR guaranteed value of 0.06 lbs/MMBTU. As a result, a typical three-day start-up, which can require up to 10 valve adjustments, was accomplished in just nine hours at the St. Johns River Power Park. In addition, the plant reported that the level of ammonia in the ash is not detectable, suggesting extremely low levels of ammonia slip from the SCR unit. These results represent a new level of performance for a unit this size.

GSG technology is also expected to enhance the attractiveness of the Company's NOxOUT CASCADE<sup>®</sup> offering. Higher flue gas velocities should allow for a smaller catalyst box and a corresponding reduction in the physical size of the NOxOUT CASCADE system. This, in turn, should lower the product's capital cost, making it even more competitive with SCR systems designed for very significant levels of NOx control.

John F. Norris Jr., President and Chief Executive Officer, commented "With our recently verified success at the St. Johns River Power Park, we have now demonstrated several new areas of expertise that should extend our reach into the SCR end of the NOx control market. In particular, the initial results for our first Graduated Straightening Grid in operation were very exciting as the GSG enabled higher levels of SCR performance than previously attained. Moreover, these results indirectly imply that the flow uniformity necessary for NOxOUT CASCADE systems to achieve high NOx reduction is, in fact, entirely possible when the appropriate technology and know-how are applied."

Mr. Norris concluded, "St. Johns River Power Park represents the first of many such GSG initiatives undertaken by Fuel Tech, as GSG designs are currently in process for an additional 16 units in the United States, Europe and China. Equally important, the global market for SCR systems remains relatively robust and offers the Company the ability to capitalize on new revenue streams."

## About Fuel Tech

Fuel Tech is a leading technology company engaged in the worldwide development, commercialization and application of state-of-the-art proprietary technologies for air pollution control, process optimization, and advanced engineering services. These technologies enable customers to produce both energy and processed materials in a cost-effective and environmentally sustainable manner.

The Company's nitrogen oxide (NO<sub>x</sub>) reduction technologies include advanced combustion modification techniques - such as low NO<sub>x</sub> burners and overfire air systems - and post-combustion NO<sub>x</sub> control approaches, including NO<sub>x</sub>OUT<sup>®</sup> and HERT<sup>™</sup> SNCR systems as well as systems that incorporate NO<sub>x</sub>OUT CASCADE<sup>®</sup>, NO<sub>x</sub>OUT ULTRA<sup>®</sup>, Rich Reagent Injection (RRI) and NO<sub>x</sub>OUT-SCR<sup>®</sup> processes. These technologies have established Fuel Tech as a leader in NO<sub>x</sub> reduction, with installations on over 550 units worldwide, where coal, fuel oil, natural gas, municipal waste, biomass, and other fuels are utilized.

The Company's FUEL CHEM<sup>®</sup> technology revolves around the unique application of chemicals to improve the efficiency, reliability, fuel flexibility and environmental status of combustion units by controlling slagging, fouling, corrosion, opacity and acid plume, as well as the formation of sulfur trioxide, ammonium bisulfate, particulate matter (PM<sub>2.5</sub>), carbon dioxide and NO<sub>x</sub>. This technology, in the form of a customizable FUEL CHEM program, is being applied to over 95 combustion units burning a wide variety of fuels including coal, heavy oil, biomass, and municipal waste. A breakdown of the nature of these customer units is posted on the Company's website.

Fuel Tech also provides a range of combustion optimization services, including airflow testing, coal flow testing and boiler tuning, as well as services to help optimize selective catalytic reduction system performance, including catalyst management services and ammonia injection grid tuning. In addition, flow corrective devices and physical and computational modeling services are available to optimize flue gas distribution and mixing in both power plant and industrial applications.

Many of Fuel Tech's products and services rely heavily on the Company's exceptional Computational Fluid Dynamics modeling capabilities, which are enhanced by internally developed, high-end visualization software. These capabilities, coupled with the Company's innovative technologies and multi-disciplined team approach, enable Fuel Tech to provide practical solutions to some of our customers' most challenging problems. For more information, visit Fuel Tech's web site at [www.ftek.com](http://www.ftek.com).

*This press release may contain statements of a forward-looking nature regarding future events. These statements are only predictions and actual events may differ materially. Please refer to documents that Fuel Tech files from time to time with the Securities and Exchange Commission for a discussion of certain factors that could cause actual results to differ materially from those contained in the forward-looking statements.*