SUCK. SQUEEZE. BANG. BLOW.

(WE PROMISE, THIS IS HOW A GAS TURBINE WORKS.)

The process of making electricity starts when the gas turbine breathes in a huge amount of air.

Air travels through the compressor section where its pressure is increased through compression.

The combustion system injects fuel where it mixes with that high pressure air. The mixture is then burned at extremely high temperatures, creating a hot gas.

Hot gas pushes the turbine blades, causing them to spin quickly. The fast spinning turbine turns a large magnet within a generator, causing electrons to move and create electricity.

BEYOND THE BANG BASICS

So how do you look inside this heavy metal to see what happening when the air and fuel mixes? Even small changes can make a big impact.

A collaboration between GE and Cascade Technologies, Inc. will result in highly advanced simulation software that enables engineers to virtually look inside a gas turbine as it operates in order to advance the state-of-the-art for new product introduction.

THE RESULT?

By providing never-before-seen information, we can directly impact future power generation products to improve efficiency, reduce emissions and increase durability.

powergen.gepower.com