Capstone Turbine Corporation
21211 Nordhoff Street • Chatsworth, CA 91311 • Tel. 818.734.5300 • Fax 818.734.5320
www.capstoneturbine.com

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The Honorable Kevin Brady
301 Cannon House Office Building
Washington, DC 20515

The Honorable Mike Thompson
231 Cannon House Office Building
Washington, DC 20515

The Honorable Jim Gerlach
2442 Rayburn House Office Building
Washington, DC 20515

The Honorable Linda Sanchez
2423 Rayburn House Office Building
Washington, DC 20515

Dear Representatives Brady, Thompson, Gerlach and Sanchez:

Capstone Turbine Corporation, the world's leading producer of low-emission microturbine systems, applauds your efforts to improve the tax code and examine appropriate incentives for the U.S. energy industry. As an energy technology manufacturer, our company is delighted to submit the following recommendations.

In brief, we believe that any modifications to the code should provide parity in the treatment of distributed energy generation technologies – and if the basis for energy tax incentives is altered, this should be done only through the balanced use of technology-neutral and performance-based criteria such as efficiency, emissions, reliability, and availability.

As you are aware, distributed generation provides energy consumers an alternative to the centralized electric grid and is of interest to many different businesses and institutions. Producing power onsite provides enhanced energy security in areas where transmission and distribution infrastructure is limited or is not keeping up with growing demand and is prone to outages. The benefits of onsite power were highlighted during several recent destructive natural disasters that resulted in long utility power outages. For many users, distributed generation provides economic cost savings compared to power from the grid, particularly where onsite thermal needs support the installation of a combined heat and power system. A customer may also prefer to invest in distributed generation to realize environmental benefits.

There are several types of distributed generation technologies from solar panels to fuel cells to microturbines. A microturbine is a small gas turbine, typically sized one megawatt and below. Through advanced technology and the continuous combustion of fuel, microturbines have extremely low emissions despite using no active after-treatment of the exhaust – thus eliminating nearly all particulate emissions and realizing large reductions in greenhouse gas emissions. A recuperated cycle also allows for highly efficient electricity production. Fuel flexible, microturbines can operate using liquid or gaseous fuels, including natural gas, biogas, diesel, biodiesel, methane, kerosene and propane.

Under current law all distributed generation systems are not treated equally. In fact, the Code singles out microturbines and combined heat and power systems for a 10% investment tax credit (ITC) and limits overall project size eligibility. Other clean forms of power (including fuel cells powered by natural gas) receive a 30% tax credit with no project size limit. Because the ITC can aid in project financing for distributed generation systems, this double standard means that the cleanest forms of baseload distributed generation are out of reach for many customers in the United States.

We proudly manufacture all of our microturbines in the United States. Capstone performed an analysis that revealed that if the ITC for microturbines is raised to 30%, our company would see a 275% increase in domestic business in the first year alone, allowing us to increase our manufacturing output and take advantage of economies of scale to lower costs. Our company would hire more workers to fulfill the increased demand for our product and invest more in R&D to continually improve our product . The first year of projects alone could potentially reduce CO2 emissions by roughly 340,000 metric tons. With parity among DG technologies in place, the deployment potential for microturbines in this country would rise to over 10,000 MW. Not only would this transform our company and allow us to increase production, but it would likely entice other American firms into the market.

However, we want to be clear. We are only looking for parity amongst distributed generation technologies. For example, if those technologies receiving 30% were brought down to 10%, customers could fairly compare microturbines with other technologies on the basis of performance. Alternatively, Capstone would support basing the level of tax incentive on a balanced combination of preferred performance attributes. These could include, for example, efficiency, emissions, reliability, and availability.

Distributed generation systems are generally more efficient than the electric grid due to the elimination of power lost through the transmission process and potential for waste heat utilization. For combined heat and power systems, total efficiencies can be as high as 85%. Compare this with the 30-35% efficiency of a traditional coal plant, the mid-40s efficiency levels of "supercritical" coal plants, or the 60% levels of IGCC coal plants and the most efficient gas-fired generators.

Distributed generation systems can reduce emissions compared to the electric grid due to the use of renewable sources of power, more efficient use of fuel, and/or use of existing process heat. For example, a Capstone C200 microturbine installed in a CHP system running on natural gas virtually eliminates all NO_x and SO_x emissions as compared to the average U.S. power plant and a standard natural gas boiler. The microturbine also reduces CO_2 by nearly 40%. Because of their low emissions and reliability, oil and gas producers deploy microturbines in shale plays to provide clean power, often using associated gas that would otherwise be flared or vented.

There is a prominent role for distributed generation technologies to play in the U.S. power infrastructure. Creating a level playing field among available technologies allows U.S. consumers to choose the best technology for their application.

Capstone Turbine Corporation thanks you for your consideration of our views on energy and manufacturing tax policy. Please don't hesitate to contact us for additional information or to arrange a discussion of our positions.

Sincerely,

James Crouse
Executive Vice President
Sales, Marketing, Product Development