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Introduction

Good morning. I am Leo Berlinghieri, the Chief Executive Officer and President of MKS Instruments which is headquartered in Andover, Massachusetts. Thank you for inviting me here to speak today.

MKS Instruments provides instruments, subsystems and process control solutions that improve performance and productivity for a number of advanced manufacturing processes. I brought with me a few photos of some of our products. We serve several markets including companies that make equipment used to produce semiconductors, flat panel displays, solar cells, and other high technology products. MKS Instruments employs close to 3,000 people worldwide and in 2007 we had \$780 million in revenue. We also have a long list of small businesses that are in our supply chain.

In addition to my company role, next year I will become Chairman of the North American Advisory Board for Semiconductor Equipment and Materials International, SEMI. SEMI is the global industry association serving the manufacturing supply chains for the microelectronic,

display and photovoltaic industries. SEMI has nearly 800 member companies in the United States and approximately 80 percent of these companies are small businesses.

Today I would like to talk about two components of the Tax Extenders Bill that are of great importance to MKS Instruments and other SEMI member companies. These issues are the R&D tax credit and the commercial investment tax credit for solar energy.

R&D Tax Credit

In terms of R&D, MKS Instruments employs over 500 engineering professionals and we expect to spend \$80 million on R&D this year, about ten percent of our revenues. That is a common range for our industry. Our R&D spending goes toward salaries for engineers and engineering consultants and toward the cost of materials and tools. An initial R&D investment of one million dollars or a little more, recurring each year, generates about \$11-\$12 million in revenue each year for about five to seven years. This is about \$50-75 million in revenue over a product's life cycle. The R&D tax credit is an important incentive to locate this value-added work in the United States.

In addition to these jobs, there are direct benefits for the U.S. government. Here are some quick back-of-the-envelope calculations. We estimate that the typical R&D credit gives us on average a \$2 million credit. At the conservative estimate, 15 percent of \$50 million in revenue resulting from the R&D project gives us a pre-tax profit of \$7.5 million. We can assume that this is taxed at 36 percent, which would provide a return from the corporation in taxes to the government of

\$2.7 million. In addition, the government receives taxes from R&D employees and any other U.S.-based hiring that stems from the associated revenue growth.

The R&D tax credit has a long history of strong bi-partisan, bi-cameral support and it is unfortunate that it expired eight months ago. Growth of the American economy is closely tied to the ability of our companies to make a sustained commitment to long-term, high-cost research and development efforts. The credit provides a critical, effective and proven incentive for companies like MKS to increase their R&D investment in the United States. It is a stimulus for U.S. investment, innovation, wage growth, consumption, and exports.

While the R&D tax credit is expired, many countries such as Ireland, Canada and China have more attractive R&D tax incentives luring research jobs away from the United States. The United States used to have the best R&D tax credit and now we are way down the list as other countries have made this a priority and the United States has not.

I urge Congress, before adjournment, to enact a seamless multi-year extension of a strengthened R&D tax credit.

Commercial Solar Energy Investment Tax Credit

The second issue is the commercial investment tax credit for solar energy. Solar energy is a new market for MKS Instruments and many other SEMI member companies. The materials and equipment used in the semiconductor industry is very similar to what is used in the solar energy industry. At a time when America's energy independence is more crucial than ever; solar energy

and other means of alternative energies are expected to boom. The commercial investment tax credit for solar energy expires at the end of this year. Unfortunately, due to the uncertainty of an ITC extension, solar projects in the United States already have been put on hold.

The commercial ITC for solar energy is a critical incentive for companies to locate their solar energy manufacturing facilities and projects in the United States. Again, just like the R&D tax credit, these investments produce jobs. According to a Navigant Consulting study, if extended, the solar energy ITC is expected to create almost 40,000 more jobs and \$8 billion in investments. If it is not extended, those jobs and investments will go elsewhere.

Other nations have very generous incentive packages for solar energy and are leading in investment in this area. If Congress fails to extend the credit, it will cause America to fall further behind and ensure that these investments are made overseas. There is no doubt that our country will be a user of solar energy. The question is whether we will be a producer of the technology or will we have to rely on others?

I urge Congress, before adjournment, to approve an eight-year extension of the commercial investment tax credit for solar energy.

Conclusion

In closing, let me reiterate that what is at stake are American jobs and investments in critical technologies. Tax policies are a key factor for companies when they are deciding where to invest and we are faced with some stiff competition from abroad. There is a very limited

window of opportunity to extend these credits this year. I urge Congress to make this a top priority and ensure that the R&D tax credit and the commercial investment tax credit for solar energy are extended before Congress adjourns for the year. We can not afford to wait.

Thank you.