Testimony Of

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On Behalf Of The

Solar Energy Industries Association

At The

Committee on Environment and Public Works
U.S. Senate

Hearing On

S. 1733, Clean Energy Jobs and American Power Act

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Chairman Boxer, Ranking Republican Inhofe and Members of the Committee, I am Peter Brehm, the Vice President of Business Development & Government Relations for the Infinia Corporation. We are headquartered in the State of Washington, and we have operations in California, Maryland, Michigan, Massachusetts and New Mexico, as well as Spain, India and Japan. I represent Infinia on the Board of Directors for the Solar Energy Industries Association.

It is an honor to appear before you to testify on behalf of Infinia and the Solar Energy Industries Association. In the five minutes I'll be speaking to you today, enough sunlight will shine upon the United States to satisfy America's energy demands for an entire month.

SEIA is the national trade association for the solar energy industry, and represents over 1000 member companies at all points of the value chain – from manufacturers, to solar installers, to financiers and to project developers. Established in 1974, SEIA works to make solar energy a mainstream and significant energy source in the United States by expanding markets, strengthening the

industry and educating the public on the benefits of solar energy.

Let me first tell you a bit about my firm. Infinia has developed and manufactures the Infinia Solar System, a unique, high-performance solar power system that uses a Stirling engine and a parabolic mirror to convert sun light, which is free, into electric power, which is valuable. Our system is not a PV or solar panel-based system, but instead a unique U.S.-developed and manufactured Concentrating Solar Power system. Each of our Infinia Solar Systems produces 3 kW of grid-quality AC electricity. Our systems do not consume water – which is in short supply in the West – nor do they need flat or graded ground to operate. And through scalability we can size our projects to fit within existing transmission and distribution system constraints.

The result: We can provide heat and power to individual customers or supplement generation for the grid without any contribution to greenhouse gas emissions.

Notably we manufacture here in the United States and, at a time when the auto industry is facing historic difficulties, our technology is perfectly suited to being manufactured on converted automobile factory lines. In fact, virtually our entire supply chain are automobile industry suppliers, most of which are based in the hard-hit Midwest including Michigan, Ohio, Indiana and Iowa

Our solar technology is only one of many that are being developed and in commercial use.

Solar energy is the cleanest and most abundant renewable energy source available. And the U.S. has some of the richest solar resources in the world. Today's technology allows us to capture this power in several ways giving the public and commercial entities flexible ways to employ both the heat and light of the sun.

The greatest challenge the U.S. solar industry faces is scaling up production and distribution of solar technology in order to continue to drive down prices to be on par with or below the price of traditional fossil generation.

President Obama has set out a goal of doubling the Nation's

renewable energy production in the next three years. A majority of States have already adopted an ambitious Renewable Portfolio Standard. But this should only be the beginning.

The outlook for solar is bright – pardon the pun – particularly if the Congress levels the field by enacting strong climate change legislation.

Recently, the U.S. solar industry has demonstrated remarkable growth with the annual rate of solar distributed generation installations increasing by more than 80% in 2008. New utility-scale solar plants have been announced in States ranging from California to Texas, Florida, Pennsylvania, New York and more, and projects totaling more than 10,000 MW are currently operational or under development.

Last year, solar energy produced 843 million kilowatt hours, as compared to less than a hundred in 1985. And for the first six months of 2009, solar produced 40 percent more electricity than in the same period in 2008.

That is great, but it is not nearly enough. More can be done and more should be done if the United States is going to put a serious dent in emissions of greenhouse gasses.

There is a very significant potential for growth of solar energy in the United States with the price signals and incentives that could be provided by this legislation. A study conducted by the Department of Energy for the Western Governors' Association determined that the seven States in the Southwest have a combination of solar resources and available suitable land to generate up to 6,800 GW of electricity. This compares to today's nameplate capacity for all electricity generation in the U.S. of 1,000 GW. If you add the solar potential from the other States, the resource available is functionally limitless.

Infinia is a growing company that currently employs over 140 people, and if a robust climate change bill is enacted our growth rate will double with commensurate increases in employment. This will be the case at solar companies across the country. Good, high-paying clean-energy jobs will be created here in the United States.

We believe this climate change legislation is a key step in a comprehensive energy policy. The proposed legislation will spur tremendous demand for all renewable energy technologies.

For Infinia, I would note the importance of promoting U.S. development and manufacturing of renewable energy technology and products. We encourage the Committee to strengthen the proposed legislation to ensure that more of the demand for renewable energy technology and products will be supplied by U.S. manufacturers.

Solar energy will create thousands of jobs, install half a gigawatt of solar capacity and avoid more than 1 million tons of carbon emissions in 2009 alone. These numbers will more than double in 2010.

We commend the sponsors of S. 1733 – Senators Kerry, Boxer and Kirk – for recognizing that solar energy and other renewables can and must be an integral part of any solution to global climate change.

With the right incentives, a fair regulatory environment and the right economic environment, there is no limit to how much solar energy can contribute to the solution.

For the solar industry, a robust climate change bill will send a clear price signal on the cost of emitting carbon, which currently has no market price other than the cost to our global environment that will be paid by our children and grandchildren. This price signal will affect long-term generation planning and project financing, and mark a paradigm shift in the nation's energy future.

In the more immediate term, solar and other renewables need to receive allowances in the early years of the program in order to scale up the industry and bring down costs so that we can more effectively satisfy the wedges of carbon-free energy.

Those allowances can come from a federal deployment programs for distributed generation and utility-scale renewables and from allowances going to the States and localities for renewables.

For Infinia, it is particularly important that some of those State allowances go toward technology development and manufacturing incentives for solar and other domestic renewable energy technologies. It would be a huge missed opportunity if we replaced oil imported from the Mideast with renewable energy technology from oversees.

In addition, we encourage the committee to consider the inclusion of Senator Sherrod Brown's IMPACT (Investments for Manufacturing Progress and Clean Technology) bill or similar proposals into this climate change legislation to spur the development and manufacturing of renewable energy technology in the U.S.

For the solar industry as a whole, it is crucial that allowances be dedicated for the deployment of all solar technologies, with direct allocations making their way to solar generators. This will act as a catalyst to the industry, directly spur deployment of renewables, and help protect the voluntary renewables markets.

This climate legislation should also move in unison with the energy bill, to comprehensively address the energy needs of the nation. We believe that this comprehensive legislation should include the following key features:

- A robust cap-and-trade program that provides real incentives for all renewable energy types, including solar.

- A strong and diverse federal renewable energy standard.

- Transmission policy reform.

- Interconnection standards and a process that provides clear, simple and reasonable specifications for a homeowner, business or installer to connect to the local utility's distribution system.

- National retail net metering standards that allow customers who generate more solar energy than they consume to sell the excess electricity back to their local utility.

- Reasonable access to Federal lands for solar projects and other renewable technologies on par with the access granted for other uses of the land, including fossil and mineral extraction.

We recognize that not all of these matters are within the jurisdiction of the Committee on Environment and Public Works, however S.1733 is a crucial part of the whole.

We strongly urge the Committee to move forward with this legislation, report it to the full Senate, incorporate provisions on the Senate floor from other committees of jurisdiction, such as the Finance Committee and the Energy Committee – and get this legislation enacted NOW.

In closing let me reiterate the key benefits of solar technology.

- Solar energy is a reliable domestic source of energy and is much less vulnerable to supply disruptions from foreign actions, natural disasters or grid instability.

- Solar technologies generate energy during peak hours of demand, when energy is in short supply and most expensive.

- Solar systems require high-tech manufacturing facilities and produce well paying, high-quality jobs.

- Solar energy is the cleanest of all energy sources, producing electric and thermal energy with zero emissions and no waste products or other forms of pollution.

- Solar energy technologies use a free, inexhaustible fuel source and therefore provide price stability for decades.

With your leadership, we can have a brighter and cleaner tomorrow. The time to act is now.

Thank you for allowing me to testify both on behalf of my company Infinia and the Solar Energy Industries Association.

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