Statement Of

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Submitted To

U.S. Senate
Committee On Finance
Business Tax Reform Working Group
Community Development & Infrastructure Tax Reform Working Group

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EXECUTIVE SUMMARY

Bloom Energy commends the Senate Finance Committee for its leadership on tax reform issues. We appreciate the opportunity to submit this statement to the Business Tax Reform Working Group and the Community Development & Infrastructure Tax Reform Working Group.

Bloom Energy is an innovative fuel cell technology company headquartered in Sunnyvale, California, and with manufacturing facilities in both Sunnyvale and Newark, Delaware. Established in 2001, Bloom Energy has developed a revolutionary on-site primary power generation system called the Bloom Energy Server® based on proprietary fuel cell technology that converts natural gas into reliable, clean, and cost-effective electricity. This solution is designed to help businesses become more secure and resilient by mitigating power-related risks for mission critical functions. The technology has been successfully commercialized and is providing power to many Fortune 500 companies including Apple, Google, Walmart, AT&T, eBay, Staples, The Coca-Cola Company, as well as notable non-profit organizations such as Caltech and Kaiser Permanente and electric utilities such as Delmarva Power

As Congress considers tax reform, we urge the Senate Finance Committee to support permanent tax policies that incentivize early adopter customers to invest in advanced energy technologies and enable these technologies to become established and cost-effective in the energy marketplace. While comprehensive tax reform discussions proceed, we urge Congress to temporarily extend the Investment Tax Credit ("ITC"; contained in Section 48 of the tax code) to enable technologies like fuel cells to continue to scale. More specifically, we urge: (1) extending the 30% rate; and (2) replacing the ITC's "placed in service" date with a "commence construction" date.

FUEL CELL TECHNOLOGY

In general, fuel cells for localized stationary power benefit from the ITC, a policy that has proven to be invaluable in facilitating a growing market of innovation. The ITC has helped leverage billions of dollars in private investment by companies seeking more reliable, more secure, more efficient power generation solutions.

For fuel cells, the ITC is just starting to have its desired impact, and the industry is seeing an inflection in growth of business orders and job creation. According to the latest figures:

- In 2013, worldwide fuel cell industry sales surpassed $1 billion for the first time—reaching $1.3 billion.
- About 35,000 fuel cell systems were shipped in 2013, an increase of 26% over 2012, and 400% more than 2008.
- Approximately 150 MW of stationary fuel cells shipped worldwide in 2013, an increase of 24% over 2012 and 244% over 2008.[1]
- The three leading stationary fuel cell companies manufacture their technologies here in the United States, and can continue to grow with the right policy frameworks in place.

[1] Department of Energy, 2013 Fuel Cell Technologies Market Report, *available at* http://energy.gov/sites/prod/files/2014/11/f19/fcto_2013_market_report.pdf.

In the United States, there is approximately 195 MW of stationary fuel cell capacity for primary and back up electricity generation. Compared to other alternative energy technologies, this represents approximately 0.3% of installed wind[2] and 1.2% of installed photovoltaic (PV) solar[3] in the United States.

This new technology represents a new solution for companies, communities, utilities, and, notably, critical federal facilities. Dependence on an aging utility grid leaves military and intelligence users exposed to surges, brownouts and unexpected service interruptions, and requires costly investments in backup equipment and power quality solutions that sit idle over 99% of the time.

BLOOM ENERGY

Bloom Energy's stationary Solid Oxide Fuel Cells provide a way for users to take control of their facilities' power quality, energy security and environmental footprint. Bloom Energy Servers, otherwise known as Bloom Boxes, offer several key benefits for Fortune 500 companies, hospitals, universities, electric utilities, and military and intelligence organizations:

- *Highly Reliable Energy Generation* as a primary power source for critical operations both when operating in parallel with the grid and independently.
- *Utilizes Domestic Fuel Supply* of natural gas, which is highly reliable and available in abundance in US and North America.
- *Resilient Modular Building Block Architecture* is fault tolerant, helping to ensure the highest levels of power availability.
- *Meet Sustainability Goals* for GHG emission reductions and energy intensity through clean power generation that will reduce a site's environmental footprint.

[2] AWEA, Fourth Quarter 2013 Market Report, *available at* http://awea.files.cms-plus.com/FileDownloads/pdfs/AWEA%204Q2013%20Wind%20Energy%20Industry%20Market%20Report_Public%20Version.pdf.
[3] SEIA, US Solar Market Insight, *available at* http://www.seia.org/research-resources/us-solar-market-insight.

PROVEN TECHNOLOGY

Bloom Energy has more than 150 MW installed. Today, our Energy Server™ technology is deployed by leading companies across a broad range of industry segments. Bloom helps these customers lower their energy costs, reduce their carbon footprints, improve their energy security, and showcase their clean energy goals.

TAX REFORM: CONTINUED NEED FOR TAX POLICIES THAT SUPPORT ADVANCED ENERGY TECHNOLOGIES

As Congress considers tax reform, there continues to be a need for tax policies that incentivize early adopter customers to invest in advanced energy technologies, including but not necessarily limited to fuel cells, to ultimately drive the cost of the technologies down and establish the technologies in the marketplace.

Advanced energy technologies harness the broad range of domestic energy resources, from fossil fuels to renewables. They provide energy independence and security, strengthening the resilience and reliability of the U.S. power grid. They offer the potential to create a market for, and increase the efficiency of, domestic natural resources. They can increase energy efficiency and reduce long-term costs, while decreasing environmental impact. Moreover, advanced energy technology development drives U.S. economic activity and creates U.S. jobs.

Advanced energy technologies often get their start with a scientist or entrepreneur who has an idea. It takes years of research and development, trials, manufacturing/production, and scaling to cultivate a concept into a commercialized, established business.

Tax incentives that support initial private demand continue to be instrumental in the development and scale-up of advanced energy technologies. The ITC incentivizes early adopter customers to invest in certain advanced energy technologies by providing a tax credit to offset some of the upfront costs associated with new technologies. In so doing, the ITC has also attracted necessary private capital to support these advanced energy technologies. Moreover, by fostering the development of advanced energy technologies in the U.S., the ITC has spurred U.S. innovation, businesses, economic activity, manufacturing, national security, and jobs.

Tax reform offers the opportunity to further strengthen the tax policies encouraging the development and deployment of domestic, secure, advanced energy technologies. In this regard, we urge Congress to make permanent the ITC or a similar tax credit incentive that supports initial private demand by allowing customers to offset a portion of the upfront investment in these technologies. We recommend the incentive be structured to support continued innovation of a range of advanced energy technologies, while providing an appropriate ramp-down as technologies become established and cost-effective. Such an incentive would increase the permanence, simplicity, and fairness of the tax code, while promoting U.S. economic growth, domestic jobs, and international competitiveness.

TAX EXTENDERS: NECESSARY BRIDGE TO TAX REFORM

In the meantime, as Congress considers tax reform, we ask that expiring policies be extended temporarily to avoid detrimental disruptions to the market. In particular, we urge that the: (1) ITC for fuel cells be expeditiously and seamlessly extended at the 30% rate; (2) the ITC's "placed in service" date be replaced with a "commence construction" date.

Although the ITC has been in place for some time, as discussed above, the fuel cell industry is still a developing and nascent one. For example, it took seven years of intensive research and development before Bloom Energy's first commercial shipment in 2008.

The ITC has been a critical component in facilitating the growth of the fuel cell industry. Extending the ITC for a specified window, such as five years, at a 30% rate would provide the necessary runway and certainty to allow the still nascent industry to mature and grow. A predictable ramp-down after this five year extension would provide an appropriate sunset, ensuring that technologies are given a fixed time to become commercially viable. Additionally, replacing the ITC's "placed in service" date with a "commence construction" date would acknowledge the often lengthy lead-time necessary for advanced energy technology manufacturing and installations, while providing parity with the Production Tax Credit contained in Section 45 of the tax code.

Moreover, although it is statutorily set to expire in 2016, it is critical that the ITC be addressed as soon as possible. The combination of the current-law "placed in service" language with the lengthy lead-time for installations, not to mention the fact that the ITC would completely disappear for fuel cells after the sunset, means that the ITC effectively expires far in advance, which could force companies to scale back operations and staff in the face of uncertainty.

CONCLUSION

Bloom Energy greatly appreciates the opportunity to submit this statement. We are pleased to serve as a resource to the Working Groups and the Committee on these and related matters. We look forward to our continued work together on these important issues.