Questions submitted by Dr. Paul Broun, Chairman, Oversight Subcommittee and The Honorable Cynthia Lummis, Chairman, Energy Subcommittee

1. Your testimony notes that annual budget impact of the Production Tax Credit (PTC) is less than \$2 billion; however, as you know, the PTC is claimed over a ten year period. The Joint Committee on Taxation estimated the one-year PTC extension had a lifetime cost over \$12 billion. Additionally, since the one-year extension, the Treasury Department increased the value of the tax credit almost five percent, thus increasing the PTC lifetime cost by about \$450 million.

Further, an academic study by an Obama Administration Treasury Official found that even before the massive subsidies included in the 2009 Stimulus bill, the wind industry has an effective tax rate of -163.8 percent. In other words, for every one dollar the industry paid in taxes, it received \$2.63 in subsidies. How do you reconcile the extensive cost of the PTC and effective tax rate with the figures included in your testimony?

As the Joint Committee on Taxation (JCT) has documented, the actual budgetary outlay of the PTC available to wind energy production for existing wind projects taking the credit was \$1.3 billion for fiscal year 2012. In comparison, annual private investment in wind energy in the United States totaled \$25 billion last year. This comparison shows the value to American taxpayers and our economy on an annual basis. When the energy and other benefits such as pollution reduction, decreased water consumption, protection against fuel price spikes, establishing an entirely new manufacturing sector, and rural economic development are included, the benefits far exceed the costs. In addition, every new tax dollar of the PTC delivered to spur domestic wind energy development is returned in full in the form of tax payments to federal, state and local governments.²

Further, JCT staff includes the inflation adjustment whenever they estimate the ten-year budgetary impact of a PTC extension. Therefore, the lifetime cost of the PTC has not increased by \$450 million, but rather has already been taken into account.

2. In December 2012, AWEA sent a letter to Congress indicating support of a six-year phaseout of the Production Tax Credit, with no PTC in 2019 or afterwards. This phase-out would "sustain a minimally viable industry, able to continue achieving cost reductions." In the letter, AWEA CEO Denise Bode wrote "we seek to work with Congress to extend the PTC for a reasonable period of time, as described-above." (Emphasis added.) However, President Obama's recent budget proposal requests a permanent extension of the PTC. Does AWEA stand by the December 2012 letter calling for a six-year permanent phase-out of the PTC?

We continue to support the statements in the December 2012 letter. In fact, we recently included the letter in our April 15 public submittal to the House Energy Tax Reform Working Group. It is important to note that the letter outlined an analysis of what would be necessary to "sustain a

¹ https://www.jct.gov/publications.html?func=startdown&id=4503

² http://www.nexteraenergyresources.com/pdf_redesign/wind_ptc.pdf

minimally viable industry," in a context where all energy technology incentives are reevaluated. The letter also emphasized that any credit reduction should be coordinated with other energy policies.

In addition, the letter stated, "Policy certainty is the only way the industry will be able to make long-term investment decisions that can solidify this American success story." The continued lack of long-term market certainty due to periodic short-term PTC extensions prevents investment in the remaining cost-reducing research and development and manufacturing operations required to make wind energy fully cost-competitive. A longer term extension of the PTC would provide the certainty required for companies to make these investments.

Questions from Rep. Joe Kennedy

1. Despite the continued insistence of a few witnesses both in this hearing and in previous Science, Space, and Technology hearings this year, I believe we are just beginning to reach our potential when it comes to wind energy. According to Dr. Malcolm Woolf of the Advanced Energy Economy who testified in front of this Committee on March 13, wind energy became the number one source of new U.S. electric generating capacity in 2012, providing 42 percent of new generating capacity. It's still a small percentage of overall energy production, but growing rapidly.

For more than a century, the government has provided important subsidies and benefits for other energy producers, such as oil and gas, to assist with the development and deployment of those technologies. I'm not here to discount those efforts, but rather to look at the most effective and efficient way to adapt our energy investments to advance new technologies, like wind.

The President's FY14 budget request includes \$365 million for Department of Energy R&D focused on innovative energy-efficient and clean energy manufacturing processes and materials technologies.

My question is, do you believe that these types of manufacturing investments will help ensure we create new jobs in this growing sector here in the U.S.? What are the other top priority investments that you believe the federal government needs to make in order to level the playing field with incumbent energy technologies?

Yes, these types of manufacturing investments are helpful in ensuring that U.S. manufacturers can effectively compete with manufacturers abroad while bringing down costs to save consumers money. However, manufacturing investments without an extension of the underlying deployment tax incentive, the PTC, will have a much more limited impact because manufacturers will have a smaller market to sell into, which reduces interest and economies of scale. We also support the President's request to increase funding for the Department of Energy (DOE) wind program to bring down wind energy technology costs, promote offshore wind energy development, and improve electric grid integration.

Policy certainty and stability are needed to make sure wind energy continues to be a part of a diverse national energy portfolio. The continuation of the PTC is the best way to deliver this certainty if provided in a long-term stable manner. The PTC is an excellent example of an effective tax incentive that cost \$1.3 billion for fiscal year 2012, while private investment in wind energy in the United States totaled \$25 billion last year. The price of wind turbines has decreased 33% in the last three years, but continued policy support through the PTC is needed to keep wind competitive with traditional energy sources that have enjoyed permanent, decadeslong support through the U.S. tax code.

2. In Cape Wind's case, this project is the first of its kind, and initial investment is expensive. This is no reason to stop the project and not move forward, but if the government follows the recommendations you provided in response to the previous question, do you believe that the wind industry can reach economies of scale? Can it get to a point where federal incentives are no longer necessary for the industry to be competitive at a large scale, assuming similar incentives are removed for incumbent technologies? If so, when?

Yes, we do believe that with longer-term policies that provide certainty for businesses, such as the PTC, the wind industry will become cost-competitive with all other energy technologies. As you mentioned above, other traditional energy technologies have benefited from tax incentives and other policy support for decades. As the cost of wind energy continues to decrease, assuming all incentives and other federal policy support are removed for other technologies, there will be a point in time when federal incentives would no longer be necessary for the wind industry. Given the dynamic nature of energy markets and the uncertain pace of technological change, it is difficult to pinpoint the exact date when wind energy could compete on costs without federal policy support. Certainly, establishing a level playing field and making sure health costs and environmental benefits are captured in the price of all fuels would be good public policy and make wind energy competitive with other energy sources in the long-term.