Statement of Dan W. Reicher
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to the
House Committee on Oversight and Government Reform
Subcommittee on Energy Policy, Health Care and Entitlements
Hearing on Oversight of the Wind Energy Production Tax Credit
October 2, 2013

Chairman Lankman, Ranking Member Speier, and members of the subcommittee, my name is Dan Reicher and I am pleased to share my perspective on the wind energy Production Tax Credit (PTC). I am Director of Stanford University's Steyer-Taylor Center for Energy Policy and Finance and a faculty member of the Stanford Law School and the Graduate School of Business. The findings and opinions in my written and oral statements related to this hearing are entirely mine and do not necessarily reflect the views of Stanford University or any other entity with which I am affiliated.

I also serve on the Secretary of Energy Advisory Board and the Board on Energy and Environmental Systems of the National Academy of Sciences. I co-chair the board of directors of the American Council on Renewable Energy and am a member of the board of directors of the American Council for an Energy Efficient Economy.

Prior to my role at Stanford, I was Director of Climate Change and Energy Initiatives at Google where we did significant investment, policy and technology work involving wind and other clean energy sources. I also served on President Obama's transition team. Prior to my position with Google, I was President and Co-Founder of New Energy Capital, a private equity firm funded by the California State Teachers Retirement System and Vantage Point Venture Partners to invest in clean energy projects. Prior to this position, I was Executive Vice President of Northern Power Systems, one of the nation's oldest wind companies.

Prior to my roles in the private sector, I served in the Clinton Administration as Assistant Secretary of Energy for Energy Efficiency and Renewable Energy where, among other things, we funded significant wind energy technology development and launched the Wind Powering America Initiative. At DOE, I also served as the Acting Assistant Secretary of Energy for Policy and International, and Department of Energy Chief of Staff and Deputy Chief of Staff.

Summary

The PTC has been a highly effective policy tool in the financing of tens of thousands of megawatts of U.S. wind projects. These projects have deployed an array of turbine technologies, with significant associated U.S. manufacturing and jobs. I support the extension of the PTC for a multi-year period as Congress transitions the industry to the same financing mechanisms -- authorized by Capitol Hill decades ago -- that have provided low-cost capital to hundreds of billions of dollars worth of oil, gas, coal and transmission infrastructure. I refer to Master Limited Partnerships (MLPs) and Real Estate Investment Trusts (REITs).

A bipartisan bill -- the MLP Parity Act -- would extend MLPs to renewable energy, energy efficiency, carbon capture and storage, cogeneration, and other technologies. The bill is co-sponsored by Representatives Poe (R-TX), Gibson (R-NY), Gardner (R-CO), Welch (D-VT), and Mike Thompson (D-CA). Senators Coons (D-DE), Moran (R-KS), Murkowski (R-AK), and Stabenow (D-MI) back a companion bill in the Senate.

On the REIT front, the Internal Revenue Service (IRS) -- on its own -- could issue a broad “revenue ruling” that would extend REITs to renewable energy. The IRS has already issued private letter rulings extending REIT status to, among other things, electricity transmission lines, gas pipelines, cell towers, and billboards.

In December 2012, thirty-five members of Congress – Republicans and Democrats – wrote President Obama urging him to support the extension of REITs and MLPs to renewable energy. I understand that the Administration is considering these approaches.

A *smart transition* to the financing of U.S. wind projects would involve a three-pronged approach:

1) A multi-year extension of the PTC, with a gradual phase-down;
2) The near-term Congressional adoption of the MLP Parity Act;
3) An IRS revenue ruling that expands REITs to include renewables.

This *smart transition* would allow the wind industry, for the next several years, to continue to build projects using a well-established financing approach -- the PTC -- while the industry also works with the existing MLP and REIT finance community to transition to these long-standing, lower-cost financing mechanisms. In this way wind companies could land in a place that much of the rest of the energy industry has long enjoyed: low-cost, government-authorized financing mechanisms *not* requiring periodic Congressional extensions. This would be a big step forward for an industry that is generating more and more good-paying U.S. jobs, as it also generates more and more low-carbon electricity.

I want to emphasize that my support for MLPs and REITs should in no way signal that I endorse an immediate phase-out of the PTC or any weakening of the current Investment Tax Credit (ITC) for solar. We need significant time for a thoughtful *phase-down* of the PTC. And we need significant time for an effective *ramp-up* of MLP and REIT financing. Above all, the industry needs policy continuity and certainty to avoid the serious consequences of past boom-and-bust cycles.

Below I briefly describe the attractiveness of MLPs and REITs for financing renewable energy projects and discuss the elements of a smart transition to more predictable and lower-cost financing of wind energy.

Lowering the Cost of Financing Renewable Energy – MLPs and REITs

Without the need to pay for fuel, two factors largely determine the cost of large-scale renewable power projects. First, *equipment* costs**,** i.e. what you pay for buying and installing wind turbines, solar panels, and the like. Second, *finance* costs, i.e. the cost of capital for a project.

Technological innovation has dramatically reduced renewable energy equipment costs over the last several years. But financial innovation has not kept pace in lowering the cost of capital for commercial-scale projects. As a result, the cost of financing today makes up an evergreater fraction of the total cost of renewable energy projects, inflating the cost of the generated electricity, sometimes significantly.

Renewable energy projects deploying well-proven wind turbines and solar equipment face higher financing costs, not because of technology or off-take risks, but rather the reliance on “tax equity”, i.e. investment built around renewable energy tax credits, the Production Tax Credit (PTC), that has been used largely to back wind projects, and the Investment Tax Credit (ITC), that has been focused primarily on solar projects.

Renewable energy tax credits have helped stimulate tens of thousands of megawatts of development across a range of clean energy technologies. They have been vital to the growth of an industry making increasingly significant contributions to our nation from an economic, security and environmental standpoint. But as financing has made up an increasing share of the overall cost of a renewable energy project -- particularly with the steep drop in associated equipment costs -- some issues have developed with these credits:

- They generally have only short-term Congressional approval. The PTC, for example, was recently reauthorized for just one year. It has expired four times in the past 15 years and in some cases the credit has actually lapsed and had to be retroactively extended. The uncertainty around these credits makes them less attractive to investors and has created boom-and-bust cycles that have hindered the sustained development of renewable power and associated domestic manufacturing.

- Renewable energy tax credits have a limited group of investors who can “monetize” them – i.e. a small number of investors nationwide with significant tax bills to offset. This requirement for “tax liability” has sidelined many interested investors including tax exempt pension funds, sovereign wealth funds, and, importantly, millions of retail investors who trade stocks. The small group of eligible investors, facing little competition, can charge higher rates for their capital.

- The tax code's ownership requirements regarding the use of some tax credits, for example the ITC, may tie up capital for years to avoid "recapture" of tax credit benefits. And there are other kinds of issues that can constrain the flow of capital in tax credit-backed deals. This general lack of "liquidity" can further drive up the rates that eligible investors charge for their capital.

There is a solution to the generally higher financing costs of tax credit-backed wind projects. Give renewable energy projects access to the same mechanisms currently providing lower-cost capital to traditional energy projects like oil and gas pipelines and transmission lines. These mechanisms are Master Limited Partnerships (MLPs) and Real Estate Investment Trusts (REITs).

MLPs and REITs combine the fundraising advantages of a classic corporation, i.e. the sale of publicly traded stock, with the tax benefits of a partnership, i.e. a single layer of taxation. These two financing mechanisms were authorized by Congress decades ago and do not require periodic reauthorization.

Since Apache Petroleum launched the first MLP in 1981, MLPs have reached a total market capitalization of over $440 billion. REITs have a total market capitalization of over $670 billion, with IRS rulings opening up REIT investment in electricity transmission, gas pipelines, and other energy-related projects.

The use of MLPs and REITs would give renewable energy projects access to far greater pools of capital and, as a result, developers would no longer have to pay scarcity prices for project capital. For example, First Wind, a major wind developer, has stated that its current cost of capital in its tax equity-based investments is 14%. The company expects its cost of capital under MLPs will be 6-8%. Barclay Bank's analysis of MLPs reports a range of yields for energy MLPs, with 7% in the mid-range. So it is reasonable to expect renewable energy projects financed using MLPs to attract capital at approximately 6-8%. Cutting the cost of capital in half for many projects in a capital-intensive industry like renewable energy will have a profound impact.

Furthermore, with publicly traded shares, MLPs and REITs would allow millions of Americans to invest in our nation's renewable energy future just like the significant opportunity they have with respect to fossil energy and transmission infrastructure. MLPs and REITs would also open an attractive secondary market for renewable energy investment by allowing the entry of new investors beyond a project's initial phase of tax benefits, thereby enhancing liquidity in the renewable power marketplace.

In recent meetings, traditional MLP investors have expressed serious interest in adding renewable energy projects to existing oil and gas MLPs. They see a variety of potentially attractive aspects to such "hybrid" MLPs, including portfolio diversification.

Clearly, there are an array of attractive features associated with MLP and REIT-based financing of renewable energy projects. The problem is that under current law renewable energy projects are not eligible for MLP and REIT investments.

The MLP Parity Act, cosponsored by Senators Coons (D-DE), Moran (R-KS), Stabenow (D-MI) and Murkowski (R-AK), was introduced in April 2013 and would change this situation for MLPs. It is an improved and expanded version of a bipartisan bill introduced in 2012 in the 112th Congress. The bill continues to include eligibility for renewable power generation and biofuels and widens the scope of projects that qualify for MLP status to include carbon capture and storage, energy storage, building energy efficiency, waste-heat-to-power, and biochemicals.

Representative Ted Poe (R-TX), Mike Thompson (D-CA), Peter Welch (D-VT), Chris Gibson (R-NY), and Cory Gardner (R-CO) also introduced the bipatisan MLP Parity Act in the House.

Regarding REITs, the Treasury Department -- on its own -- could issue a broad "revenue ruling" extending this financing mechanism to renewables. The IRS has already extended REITs, through private letter rulings, to, among other things, electricity transmission lines, gas pipelines, cell towers, and billboards.

Thirty-five members of Congress – both Democrats and Republicans -- wrote to the President in December 2012 urging his strong support for both REITs and MLPs. The letter said in part:

> *"Opening MLPs and REITs to renewable energy would level the playing field by giving renewables the same access to low-cost capital enjoyed by oil, gas, coal, and transmission infrastructure projects. Small tweaks to the tax code could attract billions of dollars in private sector investment to renewable energy deployment, reduce the cost of renewable electricity by up to one third, and dramatically broaden the base of eligible investors."*

In their letter, the Congressional members did not take a position about an important related issue, i.e. with adoption of MLP legislation how to go forward with the extension of the PTC when it expires at the end of this year, and also how to address the scheduled phase-down of the ITC at the end of 2016.

A Smart Transition to Predictable and Lower-Cost Financing of Wind Energy

We need a *smart transition* to the financing of U.S. wind projects that is both predictable -- avoiding the on-again/off-again cycle of the current PTC – and lower-cost, providing access to cheaper capital from a much broader base of investors. A smart transition would involve a three-pronged approach:

1) A multi-year extension of the PTC, with a gradual phase-down;

2) The near-term Congressional adoption of the MLP Parity Act; and

3) An IRS decision to expand REITs to include renewable energy.

This three-pronged approach would allow the wind industry to continue to build projects using a well-established financing approach -- the PTC -- as it also works with the MLP and REIT finance community to transition to these long-standing, lower-cost mechanisms. The approach would ensure that the wind industry continues on its important growth trajectory over the next few years, while it simultaneously transitions to lower-cost financing using MLPs and REITs.

In this way wind companies could land in a place that much of the rest of the energy industry has long enjoyed: lower-cost, government-authorized financing mechanisms *not* requiring periodic Congressional extensions. This would be a big step forward for an industry that is generating more and more good-paying U.S. jobs while it also generates more and more low-carbon electricity.

I want to emphasize that my support for MLPs and REITs should in no way signal that I endorse an immediate phase-out of the PTC or any weakening of the current Investment Tax Credit (ITC) for solar. A *smart transition* requires a multi-year extension of the PTC, to provide a smooth glide path as we transition to MLPs and REITs, following Congressional enactment of the MLP Parity Act and the Obama Administration's decision-making on REITs. We need several years for both a thoughtful *phase-down* of the PTC and an effective *ramp-up* of MLP and REIT financing. If Congress and the Administration can move forward in this fashion we will put the wind industry and other clean energy technologies on a stronger base, with significant economic and environmental benefits for the nation.

Thank you for the opportunity to testify.

Dan W. Reicher

Dan Reicher is Executive Director of the Steyer-Taylor Center for Energy Policy and Finance at Stanford University, a joint center of the Stanford Graduate School of Business and Stanford Law School, where he also holds faculty positions. Reicher came to Stanford in 2011 from Google, where he served since 2007 as Director of Climate Change and Energy Initiatives.

Reicher has more than 25 years of experience in energy and environmental policy, finance, and technology. He has served three Presidents including in the Clinton administration as Assistant Secretary of Energy for Energy Efficiency and Renewable Energy and Department of Energy Chief of Staff, as a member of President Obama's Transition Team and Co-chair of the Energy and Environment Team for Obama, and as a staff member of President Carter's Commission on the Accident at Three Mile Island.

Reicher is a member of the Secretary of Energy Advisory Board, the National Academy of Sciences Board on Energy and Environmental Systems and co-chairman of the Board of the American Council on Renewable Energy. He also serves on the boards of the American Council for an Energy Efficient Economy and American Rivers, the Advanced Energy Economy Advisory Committee, the Vermont Law School Environmental Advisory Committee, and is an advisor to Renewable Funding LLC and Sighten. He is also Senior Advisor to the Atlantic Wind Connection, a project backed by Google and other investors to build an underwater transmission line for offshore wind power and grid reliability along the US east coast.

In 2012 Reicher received an honorary doctorate from the State University of New York College of Environmental Science and Forestry and was also named one of the five most influential figures in U.S. clean energy by Oilprice.Com.

Before his position at Google, Reicher was President and Co-founder of New Energy Capital Corp., a private equity firm funded by the California State Teachers Retirement System and Vantage Point Venture Partners to invest in clean energy projects. He also was Executive Vice President of Northern Power Systems, one of the nation's oldest renewable energy companies and a recipient of significant venture capital investment. Reicher was also an adjunct professor at the Yale University School of Forestry and Environmental Studies and Vermont Law School.

In the Clinton Administration, Reicher served for eight years at the Department of Energy as Assistant Secretary for Energy Efficiency and Renewable Energy, Chief of Staff and Deputy Chief of Staff to the Secretary of Energy, and Acting Assistant Secretary for Policy and International Affairs. He also worked for the Senate Environment and Public Works Committee and the World Resources Institute.

Earlier in his career Reicher was as an attorney with the Natural Resources Defense Council, Assistant Attorney General in Massachusetts, a law clerk to a federal district court judge in Boston, and a legal assistant in the Hazardous Waste Section of the U.S. Department of Justice.

Reicher holds a BA in biology from Dartmouth College and a JD from Stanford Law School. He also studied at Harvard's Kennedy School of Government and MIT.

An avid kayaker, Reicher was a member of the first expedition on record to navigate the entire 1888-mile Rio Grande (with support from the National Geographic Society) and to kayak the Yangtze River in China. He is married to Carole Parker. Carole and Dan have three children and live in Piedmont California.

Committee on Oversight and Government Reform
Witness Disclosure Requirement – "Truth in Testimony"
Required by House Rule XI, Clause 2(g)(5)

Name: Dan W. Reicher

1. Please list any federal grants or contracts (including subgrants or subcontracts) you have received since October 1, 2010. Include the source and amount of each grant or contract.

None.*

2. Please list any entity you are testifying on behalf of and briefly describe your relationship with these entities.

None.

3. Please list any federal grants or contracts (including subgrants or subcontracts) received since October 1, 2010, by the entity(ies) you listed above. Include the source and amount of each grant or contract.

None.

I certify that the above information is true and correct.
Signature: [signature] Date: 9-30-13

* I am a sub-recipient for up to $10,400 on a pending research award to Stanford from DOE's Solar Energy Technologies Office, that has not yet been finalized.