THE COMMITTEE ON ENERGY AND COMMERCE

MEMORANDUM

June 18, 2012

To: Members, Energy and Commerce Committee

From: Subcommittee on Oversight and Investigations Majority Staff

Re: Where Are the Jobs? – The Elusiveness of Job Creation under the Section 1603 Grant Program for Renewable Energy

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EXECUTIVE SUMMARY

- Section 1603 of the American Reinvestment and Recovery Act (Recovery Act or "stimulus") created a grant program administered by the Department of Treasury (Treasury) and the Department of Energy (DOE). This program offered cash payments to renewable energy projects, mainly solar and wind. Before the stimulus, qualifying renewable energy projects were Federally supported, primarily through the production tax credit or investment tax credit. Through March 15, 2012, $8.2 billion (74.7 percent) of the total amount in Section 1603 grants awarded was for wind and another $2.0 billion (17.4 percent) was for solar electricity. The remaining 8 percent went to technologies such as geothermal electricity, biomass, solar thermal, and small wind.

- The Recovery Act was touted by President Obama as a jobs program. Separately, DOE Secretary Steven Chu, in testimony before a joint subcommittees of the Committee on Energy and Commerce (Committee) on March 16, 2011, stated that "the Section 1603 tax grant program has created tens of thousands of jobs in industries such as wind and solar by providing up-front incentives to thousands of projects."

- An investigation by the Subcommittee on Oversight and Investigations shows that:

  - Most current methods used to calculate jobs created by Section 1603 are <u>largely unreliable</u>. What accurate jobs data that exists for Section 1603 shows that it produces <u>very few long-term jobs</u>.

  - The Section 1603 program has <u>resulted in higher costs to the taxpayer</u> than previously anticipated.

Section 1603's Faulty Jobs Record

- Despite statements made by the Administration that the Recovery Act, and Section 1603 in particular, would create jobs, information gathered by the Committee shows that job creation is an afterthought of the Section 1603 program.

- The Committee requested that DOE and Treasury report on the number of jobs created by Section 1603:

  - Treasury stated that it does not consider job creation when awarding the Section 1603 payments: "…job creation is not one of the statutory requirements for eligibility and thus it is not a factor in the consideration process. Because the 1603 program's primary focus is on domestic renewable energy production, Treasury also does not report on the number of jobs created by the program."

  - DOE echoed Treasury, but also referenced estimates contained in a National Renewable Energy Laboratory (NREL) report. The operation and maintenance of photovoltaic and wind energy systems, in which around $8 billion of Section 1603 funds were invested, were estimated to support just over 5,000 direct and indirect jobs per year over the lifetime of the systems. Removing indirect jobs, the estimate falls to "910 annually for the lifetime of the systems," alarmingly low figures consistent with those reported by the *Wall Street Journal* in February 2012.

- The NREL estimates relied upon by DOE include projects that even NREL admits might have progressed without the Section 1603 award. In fact, NREL acknowledged that "the results presented in this report cannot be attributed to the Section 1603 grant program alone." Further, a *New York Times* article and Lawrence Berkeley National Laboratory report from 2010 confirmed that Section 1603 funds went toward many projects that were already underway.

- Besides overstating the number of jobs created by Section 1603 grants, NREL's models do not account for displaced jobs, economic activity related to changes in utilization of existing power plants, electric utility revenues, and household and business energy expenditures. The NREL study does not estimate job creation and economic impacts associated with possible alternative spending of Federal funds.

- The job creation numbers that exist for Section 1603 are based on models, not actual data from completed projects. Neither Treasury nor DOE have turned over actual jobs data on the Section 1603 grants program to the Committee.

The Cost of Section 1603 to the Taxpayer

- Over $11 billion in Federal grants have gone out the door and at least another $11 billion are yet to be paid out, according to government estimates.

- Outlays from extending the program, under the President's FY 2013 budget proposal, would add another $4.7 billion in outlays over 2012-2022. According to the Congressional Research Service and the Joint Committee on Taxation, the Section 1603 program has resulted in revenue losses that are significantly greater than the revenue losses associated with the previously available tax incentives.

I. **Introduction**

The American Recovery and Reinvestment Act of 2009, P.L. 111-5 (Recovery Act or stimulus"), was touted by President Obama as "the most sweeping economic recovery package in history."[1] The Act aimed, in part, to make investments "to put Americans to work doing the work that America needs done."[2] Unfortunately, despite spending nearly $1 trillion, the stimulus failed to achieve its promised job creation and a number of the programs it funded did not even include job creation among their primary objectives. The nation has now endured 40 consecutive months with a national unemployment rate higher than 8 percent, and new questions are being raised about programs funded by the stimulus. The Committee on Energy and Commerce (the Committee) is committed to ensuring that taxpayer dollars are used wisely, an objective that cannot be achieved without fully understanding whether a program is successful before investing additional taxpayer dollars.

The Section 1603 grants program created by the American Recovery and Reinvestment Act is a prominent example of a stimulus program that has failed to create the jobs promised by the Obama Administration. With about half the $22.6 billion Section 1603 funds already paid out, the Section 1603 program has treated job creation as little more than an afterthought. To produce evidence of Section 1603's success in creating jobs, unreliable estimates of job creation have been generated using formulas and computer models rather than citing actual employment data. Where available, estimates of actual numbers of long-term jobs created are often both small – in the hundreds or lower – and disproportionate to the billions of dollars in Federal grants made. Overall, reliable job figures have been difficult to come by, raising serious doubts about the advisability of the Administration's efforts to extending this unproven and costly program.

II. **Overview of the Section 1603 Grant Program**

Dating back to the 1970s, renewable energy companies and small businesses collected a variety of tax credits for their renewable energy projects. The most common of these were the production tax credit (PTC) for wind projects and the investment tax credit (ITC) for solar. During the Great Recession, however, companies have found it difficult to utilize these tax credits due to weak tax equity markets, which had been the primary vehicle for renewable energy projects to monetize tax incentives.

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[1] Remarks by the President on Job Creation and Economic Growth, The Brookings Institution (Dec. 8, 2009), *available at* http://www.whitehouse.gov/the-press-office/remarks-president-job-creation-and-economic-growth.
[2] *Id*.

Section 1603 of the Recovery Act, "Payments in Lieu of Tax Credits for Specified Energy Properties," created a grant program administered by the Department of Treasury (Treasury), with technical support from the Department of Energy (DOE), to offer renewable energy project developers cash payments in lieu of renewable energy tax credits. The purpose was to put capital in the hands of companies earlier in the process by enabling them to convert their PTC or ITC to a 30 percent cash payment, administered by Treasury, for projects placed in service starting on January 1, 2009. Although initially made available for property either placed-in-service or under construction in 2009 and 2010, the placed-in-service and construction start date was extended through 2011 as part of the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (P.L. 111-312).[3] President Obama's FY 2013 Budget proposes extending the Section 1603 grant program to include property with a construction start date of 2012 that is also placed in service in 2012.[4] For property that is placed in service after 2012, the Budget proposes replacing the grant program with a refundable tax credit administered by the Internal Revenue Service.[5]

As of March 29, 2012, over $11 billion in Federal funds under this program had been directed to over 5,500 awardees and 34,140 projects supporting wind, solar and other alternatives to oil and natural gas.[6] Through March 15, 2012, $8.2 billion (74.7 percent) of the total amount in 1603 grants awarded was for wind and another $2.0 billion (17.4 percent) was for solar electricity.[7] Several of the largest recipients of Section 1603 grants were U.S. subsidiaries of large foreign utilities. For example, subsidiaries of the Spanish utility Iberdrola collected over $1 billion in Section 1603 grant payments and E.On, the German electricity and natural gas company, was awarded over $500 million.[8] While the Obama Administration seeks to extend the program, Spain and Germany have recently begun reducing government subsidies for renewable energy sources.[9]

The following report on the job creation record of the Section 1603 program is based on materials provided by Treasury and DOE in response to the Committee's letter of March 15, 2012, as well as information gathered from Treasury's Office of the Inspector General, conversations with stakeholders, and public sources.

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[3] *Impact of Tax Policies on the Commercial Application of Renewable Energy Technology*: *Hearing Before the H. Subcomm. on Investigations & Oversight and the H. Subcomm. on Energy & Env't of the H. Comm. on Sci., Space, & Tech.*, 112th Cong. 5 (Apr. 19, 2012) [hereinafter Sherlock] (statement of Molly Sherlock, Specialist in Public Finance, Congressional Research Service), *available at* http://science.house.gov/sites/republicans.science.house.gov/files/documents/hearings/HHRG-112-SY21-WState-MSherlock-20120419.pdf.

[4] *Id*. at 7; *see also Creating the Clean Energy of Tomorrow and Protecting the Environment*, OFFICE OF MGMT. & BUDGET, http://www.whitehouse.gov/omb/factsheet/creating-the-clean-energy-of-tomorrow-and-protecting-the-environment (last visited June 13, 2012).

[5] *Id*.

[6] *Recovery Act –1603 Program: Payments for Specified Energy Property in Lieu of Tax Credits*, DEP'T OF THE TREAS., http://www.treasury.gov/initiatives/recovery/Pages/1603.aspx (last visited June 13, 2012) [hereinafter DEP'T OF THE TREAS.].

[7] Sherlock, *supra* note 3, at 6. Other qualifying technologies include geothermal electricity, biomass (open-loop, cellulosic), solar thermal, and small wind, which represent about 8% of total grant award dollars under Section 1603.

[8] DEP'T OF THE TREAS., *supra* note 6.

[9] Sonia van Gilder Cooke, *Will Austerity Derail Europe's Clean-Energy Movement?*, TIME (Feb. 10, 2012), http://www.time.com/time/world/article/0,8599,2106390,00.html.

III. **Majority Staff Committee Findings**

1. "It's Just a More Generous Program" – The Economic Costs of the Section 1603 Grant Program

Under the Section 1603 program, Federal payments of over $11 billion have been paid out. Through the end of 2017, it has been estimated that another $11.5 billion will be paid out, bringing the total estimated cost of the 1603 program to nearly $22.6 billion, even assuming that the program is not extended through 2012.[10] Since the Section 1603 grant program provides payments equal to 10 percent or 30 percent of the eligible cost basis for specified energy projects, these Federal payments have so far been combined with an estimated $26 billion in private, regional, and State investments in these projects since 2009.[11] The Joint Committee on Taxation (JCT) estimates that extending the PTC and the option to elect the ITC in lieu of the PTC for wind through 2013, extending the Section 1603 grant in lieu of the tax credit program through 2012, and converting the Section 1603 grant into a refundable tax credit for 2013 through 2016, as proposed by the Administration, would cost an estimated $5.7 billion over the 2012 to 2022 budget window.[12] Notably, there are no limits on the total amount of money in grants that can be paid out during the lifetime of 1603; grants are available to all projects meeting the statutory eligibility criteria.[13]

An unnamed consultant to renewable power companies quoted in *The Hill* on March 29, 2012, stated that "1603 didn't create a single new dollar of federal spending. If you qualified for the Production Tax Credit, you qualified for 1603, and the reimbursement was automatic. End of story."[14] However, the Section 1603 grant program does not come at zero cost to the Federal government, nor is it equal in cost to the preexisting tax credits. The Section 1603 grant program, unlike PTC and ITC, results in direct outlays from the Treasury. At the same time, the Congressional Research Service (CRS) confirms that the Section 1603 grant program "results in revenue losses that are greater than the revenue losses associated with the previously available tax incentives."[15]

Gilbert Metcalf, Deputy Assistant Secretary for Environment and Energy at Treasury, was quoted in the *New York Times* on October 14, 2010, prior to joining Treasury and while he was still teaching economics at Tufts University, as concurring with the view that the Section

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[10] Sherlock, *supra* note 3, at 5-6.
[11] DEP'T OF THE TREAS., *supra* note 6.
[12] *See* JOINT COMM. ON TAX'N, U.S. CONG., JCX-27-12, ESTIMATED BUDGET EFFECTS OF THE REVENUE PROVISIONS CONTAINED IN THE PRESIDENT'S FISCAL YEAR 2013 BUDGET PROPOSAL, 112th Cong. (2012), *available at* https://www.jct.gov/publications.html?func=startdown&id=4413.
[13] Letter from Richard L. Gregg, Fiscal Assistant Sec'y, Dep't of the Treas., to Rep. Fred Upton, Chairman, H. Comm. on Energy & Commerce, and Rep. Cliff Stearns, Chairman, H. Subcomm. on Oversight & Investigations of the H. Comm. on Energy & Commerce (Mar. 30, 2012) [hereinafter Gregg Letter], *available at* http://republicans.energycommerce.house.gov/Media/file/Letters/112th/033012TreasuryResponse.PDF.
[14] Ben German, *House GOP Takes Aim at Stimulus Grants for Renewables*, THE HILL (Mar. 29, 2012), http://thehill.com/blogs/e2-wire/e2-wire/219071-house-gop-takes-aim-at-stimulus-grants-for-renewables.
[15] PHILLIP BROWN & MOLLY SHERLOCK, CONG. RESEARCH SERV., R41635, ARRA SECTION 1603 GRANTS IN LIEU OF TAX CREDITS FOR RENEWABLE ENERGY: OVERVIEW, ANALYSIS, AND POLICY OPTIONS 20 (2011) [hereinafter BROWN & SHERLOCK], *available at* http://www.crs.gov/Products/R/PDF/R41635.pdf.

1603 grant and the earlier tax credit are not equivalent.[16] Noting that the grant is typically worth more money to a company than the PTC due to the grant funds' earlier availability as well as its obtainability by a wider range of developers, Metcalf adds: "it's those things that make the grant more valuable to the developer or on the other hand more costly to the taxpayer. . . it's just a more generous program."[17]

The Section 1603 grant program has been much more expensive than originally anticipated. For example, CRS details how the one-year extension of the Section 1603 grant program through 2011 is associated with nearly $3 billion in Federal revenue losses, double the estimated annual revenue losses associated with the PTC and ITC.[18] More broadly, at the time the Section 1603 grant was established, the JCT estimated 10-year revenue losses resulting from the shift from tax credits to grant payments at $223 million, substantially less than the $11 billion that has been paid out as of June 2012, over three years into the grant program.[19] CRS also points out that Section 1603 grants "may also be economically inefficient to the extent there are inframarginal beneficiaries," or "projects that would have been installed without a grant but receive a grant nonetheless," also known as "free riders."[20] CRS suggests that this problem is likely to grow as tax equity markets improve, although absent an effort by Treasury or NREL to track such data, it is not possible to quantify the losses associated with these "free riders."

It is worth noting that Treasury's Office of the Inspector General, in its *Annual Plan for FY 2012*, identified Treasury's $22 billion in non-IRS Recovery Act programs as among its "highest-risk areas" for purposes of audit planning and priority.[21] The Section 1603 grant program, at $16 billion (approximately 73 percent of the total), is the single largest component of the Recovery Act programs. As of early March 2012, the Inspector General reported that the Office of Investigations had reviewed hundreds of suspected fraudulent 1603 program applications resulting in "the initiation of numerous federal criminal investigations which are

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[16] Anne C. Mulkern, *Stimulus Cash Flowed to Completed, Under-Way Renewable Energy Projects*, N.Y. TIMES (Oct. 14, 2010) [hereinafter Mulkern], http://www.nytimes.com/gwire/2010/10/14/14greenwire-stimulus-cash-flowed-to-completed-under-way-re-95989.html?pagewanted=all.

[17] *Id*. Section 1603 grants, in contrast to tax credits, which require taxable income for an entity to directly benefit from the incentive, may be particularly helpful for small businesses with limited revenue, income, and financial sophistication. BROWN & SHERLOCK, *supra* note 15, at 12; *see also, e.g., Impact of Tax Policies on the Commercial Application of Renewable Energy Technology: Hearing Before the H. Subcomm. on Investigations & Oversight and H. Subcomm. on Energy & Env't of the H. Comm. on Sci., Space, & Tech.*, 112th Cong. (2012) (testimony of Steven Erby, Vice President of Monolith Solar Associates, LLC), *available at* http://science.house.gov/sites/republicans.science.house.gov/files/documents/hearings/HHRG-112-SY21-WState-SErby-20120419.pdf.

[18] BROWN & SHERLOCK, *supra* note 15, at 24.

[19] *Id*. at 23. "When the Section 1603 Grant program was established, the JCT estimated that the program would result in 10-year revenue losses of $218 million as taxpayers shifted from the PTC to the ITC, 10-year revenue losses of $158 million as grants were paid out, and $153 million in 10-year revenue gains due to reduced ITC and PTC claims in the future."

[20] *Id*. at 21.

[21] OFFICE OF THE INSPECTOR GENERAL, DEP'T OF THE TREAS., OIG-CA-12-003, ANNUAL PLAN FISCAL YEAR 2012 4 (2011), *available at* http://www.treasury.gov/about/organizational-structure/ig/Agency%20Documents/FINAL%202012%20ANNUAL%20PLAN.pdf; OIG Treasury Recovery Act Work Plan, OFFICE OF INSPECTOR GENERAL, DEP'T OF THE TREAS., http://www.recovery.gov/Accountability/inspectors/pages/plans.aspx?agency_code=20 (follow "Department of the Treasury (TREAS)" 10/01/2011 MS Excel hyperlink) (last visited June 14, 2012).

ongoing and have ensured that millions of dollars have not been disbursed and/or lost to suspected fraud against the program."[22]

2. Where Are the Jobs? Concerns over Wide Variation in Job Creation Estimates under 1603

In testimony before the Committee's Subcommittee on Energy and Power and Subcommittee on Environment and the Economy on March 16, 2011, Secretary of Energy Steven Chu stated that "the Section 1603 tax grant program has created tens of thousands of jobs in industries such as wind and solar by providing up-front incentives to thousands of projects" and supported the program's extension by another year.[23] Chu's comments were challenged by reports from CRS and the *Wall Street Journal* that highlighted the tremendous variability in estimates of temporary and permanent jobs spawned by the Section 1603 grant program.[24] Those reports suggested a paltry record of long-term job creation. CRS, referencing an earlier study,[25] noted that "the potential for job creation has become a key factor in evaluating renewable energy investment incentives and programs" but that "despite being an issue of importance, quantifying and measuring green job creation and growth has been difficult" and adds that "it is recommended that any job creation estimate be viewed with skepticism."[26]

Has the Section 1603 grant program lived up to the Administration's claims as an engine of job creation? Is it worthy of investing billions more? To better evaluate the Administration's claims, on March 15, 2012, the Committee sent letters to DOE Secretary Chu[27] and Treasury Secretary Timothy Geithner[28] requesting information on the implementation of Section 1603 with a focus on its record of job creation. Responses provided by DOE and Treasury to the Committee's inquiry raise serious concerns about this record.

3. Despite Previous Claims, Job Creation Is Not a Factor in Awarding 1603 Funds

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[22] *Budget Hearing – Office of Treasury IG and Office of Treasury IG for Tax Administration: Hearing Before the H. Subcomm. on Fin. Services & Gen. Gov't of the H. Comm. on Appropriations*, 112th Cong. 5 (2012) (statement of Eric M. Thorson, Inspector General, Department of the Treasury), *available at* http://appropriations.house.gov/UploadedFiles/HHRG-112-AP23-WState-EThorson-20120307.pdf.

[23] *FY 2012 DOE and NRC Budgets: Hearing Before the H. Subcomm. on Energy & Power and the H. Subcomm. on Env't and the Econ. of the House Comm. on Energy and Commerce*, 112th Cong. 12 (2011) (statement of Steven Chu, Secretary, Department of Energy), *available at* http://energy.gov/sites/prod/files/ciprod/documents/3_16_11_S_Final_Testimony.pdf.

[24] Ianthe Dugan & Justin Scheck, *Cost of $10 Billion Stimulus Easier to Tally Than New Jobs*, WALL ST. J. (Feb. 24, 2012) [hereinafter Dugan & Scheck], *available at* http://online.wsj.com/article/SB10001424052970203710704577050412494713178.html.

[25] *See* RICHARD J. CAMPBELL & LINDA LEVINE, CONG. RESEARCH SERV., R40833, RENEWABLE ENERGY – A PATHWAY TO GREEN JOBS? (2009), *available at* http://www.crs.gov/Products/r/pdf/R40833.pdf.

[26] BROWN & SHERLOCK, *supra* note 15, at 24.

[27] *See* Letter from Rep. Fred Upton, Chairman, H. Comm. on Energy & Commerce, and Rep. Cliff Stearns, Chairman, H. Subcomm. on Oversight & Investigations of the H. Comm. on Energy & Commerce to Steven Chu, Secretary, Department of Energy (Mar. 15, 2012), *available at* http://republicans.energycommerce.house.gov/Media/file/Letters/112th/031512DOE.pdf.

[28] *See* Letter from Rep. Fred Upton, Chairman, H. Comm. on Energy & Commerce, and Rep. Cliff Stearns, Chairman, H. Subcomm. on Oversight & Investigations of the H. Comm. on Energy & Commerce to Timothy Geithner, Secretary, Department of the Treasury (Mar. 15, 2012), *available at* http://republicans.energycommerce.house.gov/Media/file/Letters/112th/031512Treasury.pdf.

Treasury, which submitted its response to the Committee on March 30, 2012, states without equivocation that "job creation is not one of the statutory requirements for eligibility and thus it is not a factor in the consideration process. Because the 1603 program's primary focus is on domestic renewable energy production, Treasury also does not report on the number of jobs created by the program."[29] DOE, in its response to the Committee received on April 6, 2012, largely defers to Treasury's response, while noting that although Treasury does not report job statistics related to the Section 1603 program, "analysis from a number of sources both within and outside of government supports the program's positive impact on employment and the economy,"[30] referring in particular to a report released that same day by the DOE's National Renewable Energy Laboratory (NREL).[31]

4. Failing to Meet Expectations: Existing Job Estimates Vary Widely and Are Relatively Modest

The April 2012 NREL report uses Jobs and Economic Development Impacts (JEDI) models to assess the job creation and economic impacts for large wind and solar photovoltaic projects funded under Section 1603. For example, in these two sectors of the renewable energy market, construction- and installation-related expenditures are estimated to have supported an average of 52,000-75,000 direct and indirect jobs per year over the program's construction period (2009-2011).[32] In the operational period, the annual operation and maintenance of these photovoltaic and wind systems are estimated to support between 5,100 and 5,500 direct and indirect jobs per year on an ongoing basis over the 20- to 30-year estimated life of the systems.[33]

However, after exempting from the latter tally indirect jobs existing during the operational period, NREL estimates that onsite jobs directly supporting the service and maintenance of these large wind and photovoltaic projects under Section 1603 – which NREL notes represent 92 percent of total payments under section1603, or over $8 billion as of November 2011 – will "account for approximately 910 jobs annually for the lifetime of the systems."[34] Of this figure, 770 jobs were attributable to large wind projects, the remainder to solar.[35] Dr. Michael Pacheco, a Vice President of NREL, observed at the April 19, 2012, House Science Committee hearing that this direct jobs estimate is fairly consistent with what was reported by the *Wall Street Journal* in February 2012 with regard to large wind projects – that a sampled 40 percent of Section 1603 funding, or $4.3 billion, went to 36 wind farms that at the

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[29] Gregg Letter, *supra* note 13.
[30] Letter from David Danielson, Assistant Sec'y, Dep't of Energy, to Rep. Fred Upton, Chairman, H. Comm. on Energy & Commerce, and Rep. Cliff Stearns, Chairman, H. Subcomm. on Oversight & Investigations of the H. Comm. on Energy & Commerce (Apr. 6, 2012) [hereinafter Danielson Letter], *available at* http://republicans.energycommerce.house.gov/Media/file/Letters/112th/040612DOEResponse.pdf.
[31] *See* DANIEL STEINBERG, GIAN PORRO, & MARSHALL GOLDBERG, NREL, DEP'T OF ENERGY, PRELIMINARY ANALYSIS OF THE JOBS AND ECONOMIC IMPACTS OF RENEWABLE ENERGY PROJECTS SUPPORTED BY THE §1603 TREASURY GRANT PROGRAM (2012) [hereinafter NREL REPORT], *available at* http://www.nrel.gov/docs/fy12osti/52739.pdf.
[32] *Id*. at v.
[33] *Id*.
[34] *Id*. at 18-9.
[35] *Id*. at 18.

time of writing employed about 300 people, according to the companies and economic development officials.[36] Along similar lines, the *New York Times* reported in October 2010 that projects receiving the largest Section 1603 grants produced, on average, 15 to 20 permanent jobs, and sometimes fewer.[37]

It should be noted that these figures are substantially lower than the recipient-reported jobs estimates as of April 20, 2012, which were supplied by Treasury in response to the Committee's follow-up request. According to these unsubstantiated estimates, approximately 150,000 full-time and 205,000 part-time jobs were created or retained.[38] According to CRS, Treasury has generally avoided releasing these data due to inconsistency in such self-reported job creation statistics.[39] Likewise, the NREL report maintains that since the Section 1603 program "does not provide guidance on the types of jobs that should be included or the methodology applicants should employ to estimate the number of jobs," recipient-reported estimates "are not suitable reference points for this analysis."[40]

The discrepancy between Treasury's recipient-reported jobs estimates and those of NREL, rather than clarifying the record of Section 1603 on job creation, only serves to raise further doubts about the value and accuracy of such figures.

5. Major Limitations on Models Estimating Section 1603 Job Creation

Besides drawing attention to the problematic nature of many estimates and the significant variability among reports of estimated jobs created, the NREL report highlights other limitations intrinsic to its model-generated job estimates. Significantly, this includes the fact that "the results presented in this report cannot be attributed to the Section 1603 grant program alone. Some projects supported by a 1603 award may have progressed without the award, while others may have progressed only as a direct result of the program; therefore, the jobs and economic impact estimates can only be attributed to the total investment in projects."[41]

Concerns over the incidence and cost of free-ridership in the Section 1603 grant program – projects whose completion "was likely not strictly dependent on the grant, and likely would have been deployed under the PTC if §1603 did not exist" – were previously identified in a Lawrence Berkeley National Laboratory study from April 2010.[42] In that report, it was estimated that of wind projects that had elected Section 1603 as of March 1, 2010, 61 percent of generated

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[36] *Impact of Tax Policies on the Commercial Application of Renewable Energy Technology: Hearing Before the H. Subcomm. on Investigations & Oversight and the H. Subcomm. on Energy and Env't of the H. Comm. on Sci., Space, and Tech.*, 112th Cong. (2012) (statement of Dr. Michael Pacheco, Vice President, NREL), *available at* http://science.house.gov/sites/republicans.science.house.gov/files/documents/hearings/HHRG-112-SY21-WState-MPacheco-20120419_1.pdf; Dugan & Scheck, *supra* note 24.
[37] Mulkern, *supra* note 16.
[38] Email to H. Comm. on Energy & Commerce staff from the Dep't of Treasury, April 20, 2012.
[39] BROWN & SHERLOCK, *supra* note 15, at 24.
[40] NREL REPORT, *supra* note 31, at 6.
[41] *Id*. at vi.
[42] MARK BOLINGER, RYAN WISER, & NAÏM DARGHOUTH, LBNL, DEP'T OF ENERGY, PRELIMINARY EVALUATION OF THE IMPACT OF THE SECTION 1603 TREASURY GRANT PROGRAM ON RENEWABLE ENERGY DEPLOYMENT IN 2009 24 (2010), *available at* http://eetd.lbl.gov/ea/emp/reports/lbnl-3188e.pdf.

wind power capacity as of that time would likely have been deployed under the PTC absent the grant, although when viewed on a quarterly basis the figures have been declining over time.[43] In fact, the *New York Times* has reported that in many instances Section 1603 funds went to projects that were already under construction or were already producing electricity.[44] Nevertheless, the NREL report concedes that "no attempt was made to estimate the number of projects or amount of capacity that would have been built without a Section 1603 grant, which would be necessary in order to quantify the portion of the total jobs and associated economic impacts attributable to the §1603 program."[45]

In addition, the NREL report states that its results should be interpreted as gross rather than net estimates.[46] As gross impact models, the JEDI model used by NREL does not account for displacement of jobs or economic activity related to changes in utilization of existing power plants, electric utility revenues, and household and business energy expenditures.[47] Jobs and economic impacts associated with possible alternative spending of the Federal funds used to support Section 1603 projects were not estimated in the study.[48] It is also noted that rather than analyzing each of the tens of thousands of projects individually, NREL aggregated projects into a set of representative projects based on their characteristics, and the impacts were estimated based on these representative plants.[49]

IV. **Conclusion**

How many jobs did Section 1603 actually create? The NREL report is, according to DOE, an interim step in Treasury's and DOE's effort to demonstrate the record of the Section 1603 grant program on job creation as "further work is underway to validate and cross-check their accuracy against data from completed renewable energy projects."[50] Although DOE asserts that the outcomes of NREL's analysis are consistent with prior analyses prepared by other DOE laboratories and outside organizations, the fact remains that models used to estimate job creation are no substitute for actual data from completed projects. Despite the many requests made to DOE and Treasury, no such data has been made available to the Committee. Where available, estimates of long-term, direct and indirect jobs created by Section 1603 projects are unimpressive, especially given the billions of dollars in Federal outlays associated with this program.

Arguably, DOE and Treasury do the Section 1603 program a disservice so long as they fail to collect and report reliable jobs data. In the current economic and budgetary climate, the Committee, and Congress as a whole, must refrain from serving as a rubber stamp for costly stimulus-related programs lacking a transparent and proven record on job creation.

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[43] *Id*.
[44] Mulkern, *supra* note 16.
[45] NREL REPORT, *supra* note 31, at 3.
[46] *Id*. at 7-8.
[47] *Id*.
[48] *Id*. at 8.
[49] *Id*. at 9.
[50] Danielson Letter, *supra* note 30.

The Section 1603 grant program was sold to the American people as a necessary stimulus jobs program, and yet, the Treasury and Energy Departments do not have the numbers to back up the Obama Administration's claims of its success in creating jobs. Astonishingly, Treasury begrudgingly clarified that job creation is not a "statutory requirement" when selecting projects for Section 1603 funding. For the past 40 months, the Nation has endured greater than 8 percent unemployment because of the Obama Administration's failed economic policies. Despite the failure to create jobs, the Obama Administration now wants to double down on the Section 1603 program. Jobs remain job one for the Energy and Commerce Committee. The Committee will continue its aggressive oversight in the effort to foster economic growth and create jobs, working to ensure that when flawed programs fail, American taxpayers are not stuck paying the price.