Preliminary Evaluation of the Impact of the Section 1603 Treasury Grant Program on Renewable Energy Deployment in 2009

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To qualify for the Section 1603 Treasury Grant Program (TGP), created by the Recovery Act, projects must commence construction by the end of 2010. With this deadline approaching, the House of Representatives Committee on Ways and Means requested that Lawrence Berkeley Laboratory evaluate the effectiveness of the Section 1603 Program to date. Highlights from the report are provided below.

- The TGP has been heavily used by renewable project developers. At the time of the report, in 2009 64% of the eligible wind power capacity and 100% of the eligible geothermal capacity took the TGP as opposed to an investment tax credit or production tax credit (PTC).
- The TGP supports technology diversity and has awarded the grant to a wide range of projects from biomass, combined heat & power, solar photovoltaic, solar thermal electric, solar heat & hot water, wind, landfill gas, hydropower, geothermal, and fuel cell.
- In total, **4.25GW of renewable power projects** have come online and been supported by the TPG at the time of the report.[1]
- Comparing actual 2009 wind power capacity additions to what had been expected in late 2008 or early 2009 shows that the TGP helped deploy an additional **2,400MW of wind power alone**. This additional capacity has supported an estimated **51,600 short-term jobs in the U.S. during the construction phase, and 3,860 gross long-term jobs in the U.S. during the operational phase**.[2]
    - If the TGP were subject to Buy American provisions, the operational and onsite construction jobs would not increase much, as those jobs are located domestically regardless of the origin of materials used. The number of supply chain and induced jobs would increase by 65%.[3] However, given the reality of wind turbine manufacturing in the U.S. not currently capable of supplying 100% of the wind power capacity seeking the TGP, **any requirement to source 100% domestic content would reduce wind power installations and could yield significant near-term domestic job losses relative to the current TGP design**.
- The TGP has provided significant economic value to many renewable power projects: a reduced market dependence on scarce and/or costly third-party tax equity, an increase of around 2% in the face value to the projects for wind and geothermal compared to the PTC, and a number of other smaller ancillary benefits. These smaller benefits include full relief from the alternative minimum tax, the ability to pursue leasing as a financing option, and a reduction in performance risk, among others.[4] These benefits may have helped spur more renewable power installations in 2009 than would otherwise have occurred.

The full report is available at: http://eetd.lbl.gov/ea/emp

[1] Geothermal heat and solar hot water systems are not included in this total.

[2] These jobs are full-time-equivalent (FTE) and derived from NREL's JEDI model, and based on an estimate of 60% domestic content in average U.S. wind power projects.

[3] The JEDI model estimates that the TGP has supported about 62% of the maximum number of short-term job-years during the construction phase of wind power projects built in 2009, and about 98% of the maximum number of long-term jobs during the operational phase of those projects that is could possibly support.

[4] The value provided by just a subset of these ancillary benefits can exceed the relative face value of choosing the treasury grant over the PTC when taken in aggregate.