

A Sharper DOE Policy Tool For Green Project Stimulus



Law360, New York (April 30, 2014, 3:40 PM ET) -- On April 16, 2014, the U.S. Department of Energy released a draft solicitation for new loan guarantees under Section 1703 of Title XVII of the Energy Policy Act for up to \$4 billion for innovative renewable energy and efficient energy projects located in the United States to help commercialize technologies that may be unable to obtain full commercial financing. The solicitation is intended by the DOE to support technologies that are “catalytic, replicable and market ready.” While eligibility under the final solicitation will be determined on a project-by-project basis, the solicitation specifically identifies five technology areas of particular interest to the DOE under the solicitation.

Advanced Grid Integration and Storage

This area focuses on renewable energy systems that mitigate issues related to variability, dispatchability, congestion and control by incorporating technologies such as demand response or local storage. These advanced system designs will demonstrate greater grid compatibility of generation from renewable resources and open up an even larger role for renewable power generation.

The DOE anticipates qualifying projects may include, but are not limited to: renewable energy generation, which includes distributed generation and incorporating storage; smart grid systems, which incorporates any combination of demand response, energy efficiency, sensing and storage to enable greater penetration of renewable generation; micro grid projects that reduce carbon dioxide emissions at a system level; and storage projects that clearly enable greater adoption of renewable generation.

Drop-In Biofuels

This area focuses on biofuels, which are more compatible with today’s engines, delivery infrastructure and refueling station equipment. These projects take advantage of existing infrastructure by providing nearly identical bio-based substitutes for crude oil, gasoline, diesel fuel and jet fuel, or projects that produce intermediate fuel feedstocks that can be delivered to and integrated into existing oil petroleum

refineries.

These types of projects would not be restricted by current ethanol/biodiesel blend levels and could drive a catalytic change in the fuels market. The DOE anticipates that qualifying projects may include, but are not limited to: new bio-refineries that produce gasoline, diesel fuel and/or jet fuel; bio-crude refining processes; and modifications to existing ethanol facilities to gasoline, diesel fuel and/or jet fuel.

Waste-To-Energy

This area focuses on projects harnessing waste products, such as landfill methane and segregated waste as a source of energy. These types of projects will enable commercial-scale utilization of waste materials that are otherwise discarded and produce significant clean, renewable energy. The DOE anticipates that qualifying projects may include, but are not limited to: methane from landfills or ranches via biodigesters; crop waste-to-energy and bioproducts; and forestry waste-to-energy and co-firing.

Enhancement of Existing Facilities

This area focuses on projects incorporating renewable generation technology into existing renewable energy and efficient energy facilities to significantly enhance performance or extend the lifetime of the generating asset. The DOE anticipates that qualifying projects may include, but are not limited to: incorporation of power production into currently nonpowered dams; inclusion of variable speed pump-turbines into existing hydro facilities; and retrofitting existing wind turbines.

Efficiency Improvements

This area focuses on projects that incorporate new or improved technologies to increase efficiency and substantially reduce greenhouse gases. The DOE anticipates that qualifying projects may include, but are not limited to, projects that: improve or reduce energy usage in residential, institutional and commercial facilities, buildings and/or processes; recover, store or dispatch energy from curtailed or underutilized renewable energy sources; recover, store or dispatch waste energy from thermal, mechanical, electrical, chemical or hydro-processes.

Recently, the DOE's loan guarantee programs ("LGP") have attracted substantial political controversy from Solyndra LLC (\$535 million committed/\$528 million drawn), Beacon Power Corp. (\$43 million) and Fisker Automotive Holdings Inc. (\$529 million committed/\$192 million drawn), and have received significant criticism stemming therefrom. For several reasons, some of which are discussed below, it is likely that this solicitation may be a catalyst for more criticism and controversy.

Conclusion

Critics of the DOE's LGP include the DOE's own inspector general, whose reports, including those for Abound Solar Inc. (\$400 million committed/\$68 million drawn), Ecotality Inc. (\$135 million) and Innovative Energy Technologies for 2007 and 2009 and Clean Vehicle Technologies, reveal an

unfortunate history of inadequate controls and management of these programs, including in the management and administration of law firm procurement and law firm-disclosed conflicts as well as a lack of transparency and consistency in the administration thereof due to inadequate policies and procedures and ineffective oversight. As to be expected, LGP management has objected to such criticisms, although — and somewhat inconsistently — has responded to the effect that it is implementing improvements intended to address such shortcomings.

A similarly robust criticism can be found in the U.S. Government Accountability Office's March 2012 58-page report (GAO-12-157), which concluded that further action was required to improve the tracking and review of related applications. The report reviewed the prior nine solicitations by the DOE under the LGP and the related 460 applications received thereunder, which resulted in \$15.1 billion of issued loan guarantees and a further \$15 billion conditionally committed. Of these 460 applications, as of September 2011, 40 had closed or had received a conditional commitment, 66 were still pending and 354 had been withdrawn or rejected.

Significantly, the GAO found that the DOE lacked a consolidated database for these applications, instead having to compile data from several sources, and, as did the DOE's inspector general, found that the LGP did not adhere to its review process, including an identified 43 key steps, and did not consistently follow its review procedures, although this in part was due to the fact that some of such process was outdated and did not always document its review steps.

More positively, the GAO found that the time taken to process LGP applications had been progressively reduced over time, at least for Section 1705 applications, and that the LGP is mostly functional and sets in motion a substantial federal effort to promote energy technology innovation and job creation.

A more tempered review of the LGP is contained in Hilary Kao's "Beyond Solyndra: Examining the Department of Energy's Loan Guarantee Program," which considers the effectiveness of the LGP as a policy tool and generally cautions that care is required in implementing the LGP for it to be effective.

Professor Kao provides a detailed and useful history of the LGP, but concludes that, despite lacking clear congressional guidance as to the scope of and expectations for the program along with a reasonable time and available set of resources to implement it, the DOE generally has successfully implemented it.

Without question, the LGP is an important policy tool that offers a potentially powerful stimulus for near-commercial renewable and efficient energy technologies. However, past criticism should be a stimulus for improvement. Only time will tell if the DOE can respond to these criticisms and demonstrate the transparency, consistency and effectiveness evidently missing from prior solicitations.

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