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May 6, 2009

The Honorable Steven Chu
Secretary of Energy
Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585

RE: Draft Funding Opportunity Announcement (FOA) for the Smart Grid Demonstrations - #DE-FOA-0000036, and Draft Notice of Intent (NOI) for the Smart Grid Investment Grant Program – #DE-FOA-0000058A

Dear Mr. Secretary:

California shares the nation's goal of modernizing the United States electricity grid through Smart Grid advancements. California is pleased to see that the U.S. Department of Energy ("DOE") has released detailed smart grid solicitations that demonstrate DOE's commitment to fund innovative projects that will advance the nation's Smart Grid knowledge and support policies, such as reducing greenhouse gas emissions and increasing energy efficiency, demand response, and renewable energy. DOE's emphasis on measuring the success of projects will help ensure that projects funded by the American Recovery and Reinvestment Act of 2009 ("Recovery Act") are a foundation for continued modernization of the grid.

However, the draft guidelines fail to adequately support the large-scale, integrated smart grid demonstration projects – including integrated "smart communities," multi-sector and cooperative projects – that California believes are critical to launching Smart Grid efforts. To that end there are several areas where California recommends DOE take a different approach to more effectively achieve the goals of the Recovery Act.

In response to the DOE Notice of Intent for Smart Grid Investment Grant Program ("NOI") and Draft Funding Opportunity Announcement for Smart Grid Demonstrations ("FOA"), California is submitting the following questions and comments. Many of California's questions and comments are overarching in nature or apply to both the NOI and FOA. Therefore, California is submitting the same document for both the NOI and FOA. Following the common questions and comments there are several questions and comments that pertain to just the NOI or the FOA.

QUESTIONS AND COMMENTS

A. Applicable to Both the NOI for Smart Grid Investment Grant Program and the FOA for Smart Grid Demonstrations

California strongly supports the list of public benefits that DOE intends to consider when evaluating Smart Grid projects: reduced greenhouse gas (GHG) emissions; lower costs; enhanced cost-effectiveness; increased reliability; greater energy security; flexibility to accommodate new energy technologies, including renewable, intermittent and distributed sources.¹ We suggest adding to this list of public benefits increasing demand response and energy efficiency. These public benefits are strongly aligned with California's energy priorities.² California also supports DOE's focus on dynamic pricing.³ In concert with advanced metering infrastructure, dynamic pricing can lower costs, improve system reliability, reduce greenhouse gas emissions, engage end use consumers in energy conservation, and support modernization of the electric grid.

However, in several areas California recommends that DOE take a different approach. California also requests clarification of some aspects of the notices as described below:

- 1. Significantly increase the caps per project to allow for larger utility Smart Grid projects.**

California recommends eliminating the caps on awards, raising them to \$200 million or alternatively, basing the caps on the size of the utility applying for the award. Both solicitations set caps on maximum awards that are too low. The low cap places the nation's larger utilities, which serve the nation's largest cities, at a distinct

¹ U.S. Department of Energy's Office of Electricity Delivery and Energy Reliability, DE-FOA-0000058A, Notice of Intent to Issue a Funding Opportunity Announcement for the Smart Grid Investment Grant Program, ("NOI") at 13 (April 16, 2009), DOE, DE-FOA-0000036, Draft Funding Opportunity Announcements for Smart Grid Demonstrations, ("FOA") at 39 (April 16, 2009).

² For important California energy policies see the Energy Action Plan (May 8, 2003) and Energy Action Plan II (Sept. 21, 2005). Also see the California Energy Commission's 2008 Integrated Energy Policy Report Update (2008 IEPR Update) which addresses both near-term and long-term strategies to reach the state's renewable energy goals. Specifically, the 2008 IEPR Update states: "Energy storage and transmission measurement and information systems can play an important role in helping to integrate renewables. Improvements in wind and solar forecasting and further development of the 'smart grid' concept can provide additional benefits. The state needs to assess these new technologies and strategies to determine which are appropriate for near-term and long-term implementation, and what efforts should be undertaken to accelerate commercialization of the most promising potential solutions." Furthermore, in opening its rulemaking to consider Smart Grid policies, the California Public Utilities Commission identified a similar list of public benefits that a Smart Grid could support including reducing greenhouse gas emissions, increasing energy efficiency and demand response, expanding the use of renewable energy, and improving reliability. Cal. Pub. Util. Commission, Rulemaking R.08-12-009 (Order Instituting Rulemaking to Consider Smart Grid Technologies Pursuant to Federal Legislation and on the Commission's own Motion to Actively Guide Policy in California's Development of a Smart Grid System.) (Dec. 22, 2008).

³ NOI at 13, FOA at 39.

disadvantage. These utilities have the most potential for maximizing the cost-effectiveness of Smart Grid investments. Additionally, the low limit could also discourage several utilities from partnering together to collaborate on a more cost-effective, innovative integrated Smart Grid system proposal. For example, some of the potential California projects include partnerships between a utility, a large university and/or a municipality, thereby leveraging dollars as well as future career development opportunities. Instead, the current cap could cause utilities to pursue separate, smaller projects that are not as regionally integrated or cutting-edge. While the per project cap may have been imposed to “spread the money around the nation”, we believe the caps will place an arbitrary limit on cutting edge projects that could provide important information on integration of system operations, cost effectiveness, and multiparty projects (e.g. projects involving multiple parties such as a utility, municipality, educational institution, etc.).

2. Increase the funding level for the Smart Grid Demonstration solicitation.

California supports DOE’s commitment to regional demonstrations and sees great potential in this area. Region-wide projects, which tend to include large and complex projects, are necessary to assess the full potential of a smarter grid. However, less than one-tenth of the total funding is allocated toward these regional demonstration projects, and thus only a handful of such demonstrations could be funded using Recovery Act money. California believes that it is more appropriate to evenly divide the allocations between investment grants and demonstrations, with a focus on regional demonstrations.

3. Consider existing state energy policies.

California and other states have existing state energy policies and laws that should be considered to develop an appropriate strategy to modernize the electric grid in each state or region. For example, California policies and law require the reduction of greenhouse gas emissions, an increase in renewable energy, and the expansion of energy efficiency and demand response.⁴ Many other states also have state-specific policy priorities. Therefore, California requests that DOE include selection criteria that consider the degree to which proposals address key State policies. Furthermore, to help states monitor potential projects that impact their states, DOE should inform a state what applications have been received that were submitted by an applicant in the state or that would involve investments in the state.

⁴ See, A.B. 32, 2006 Cal. Stat., Ch. 488 (codified at Cal. Health & Safety Code §§ 38500-38599), California Renewable Portfolio Standards program established by SB 1078, 2002 Cal. Stat. Ch 516, modified by SB 107, 2006 Cal. Stat. Ch 464, and SB 1036, 2007 Cal. Stat. Ch 685 (codified at Cal. Pub. Util. Code § 399.11, *et seq.*), Executive Order S-14-08 directs all state agencies to work toward a 33% RPS by 2020 (Nov. 17, 2008). For an integrated view of California’s energy efficiency plan visit <http://www.californiaenergyefficiency.com/docs/EEStrategicPlan.pdf>.

4. Adopt a flexible approach if an applicant's project requires state or local approvals.

The NOI's Draft Application Requirements require an applicant to identify decisions requiring external approval⁵, and the receipt of required regulatory approvals is included in the Draft Merit Review Criteria.⁶ The FOA does not explicitly mention how DOE will take into consideration required regulatory approvals. California requests clarification as to how DOE intends to judge applications that require state or local approvals and requests flexibility in DOE's process so that DOE will take into consideration approvals that an applicant receives after an application is filed.

In some cases, funding that an investor-owned utility applicant intends to put toward a project may require approvals from state public utilities commissions. Publicly-owned utilities will generally need to seek approval from local governing boards. Some projects could also require environmental review, pursuant to state law. In some cases a project might receive necessary state or local approvals subsequent to an application being filed, due to the time it takes to file and process these approvals at the state or local level. California requests that DOE allow applicants to notify DOE when state or local approvals have been received and that DOE takes into account such approvals when evaluating projects.

5. Clarify how the "double dipping" prohibition will be applied.

California requests DOE to clarify how it intends to apply Energy Independence and Security Act of 2007 Section 1304(b)(3)(D), which restricts an entity's ability to receive funding through both the Smart Grid Regional Demonstrations Initiative and the Smart Grid Investment Grant.⁷ California recommends that DOE avoid an interpretation that would discourage larger deployments that could take advantage of multiple programs. Specifically, an entity should only be prohibited from received funding under both programs for the same piece of equipment or device or for redundant services. If an entity is pursuing a larger project, and only part of the project receives funding through the Regional Demonstrations Initiative, the entity should be able to seek Investment Grants for other portions of the deployment that did not receive funding under the Regional Demonstrations Initiative.⁸

California also expects that some entities will pursue funding under both the Smart Grid Regional Demonstrations Initiative and the Smart Grid Investment Grant for

⁵ NOI at 10.

⁶ *Id.* at 13.

⁷ "No person or entity participating in any demonstration project conducted under this subsection shall be eligible for grants under section 1306 for otherwise qualifying investments made as part of that demonstration project." Energy Independence and Securities Act of 2007 (EISA), Pub. L. No. 110-140, §1304(b)(3)(D), 121 Stat. 1492, 1787 ("EISA").

⁸ However, an applicant should not be able to count an Investment Grant as part of their cost share for a Demonstration.

different activities. Thus, DOE should clarify that an entity participating in a demonstration project is eligible for grants under section 1306 for qualifying investments that are not made as part of the demonstration.

6. Adopt reporting requirements that allow states and the public to monitor the progress of projects.

Pursuant to the Recovery Act, Section 1512, Smart Grid Demonstrations and Smart Grid Investment Grant recipients will be required to submit quarterly reports, and DOE will be required to make the information in the reports publicly available by posting on a website.⁹ The NOI further states that DOE will require reporting on project progress relative to the project plan and will require the annual reporting of program metrics.¹⁰

California emphasizes that this reporting will be important if the federally funded Smart Grid projects are to serve as a foundation for further modernization of the grid. The reports will also be used by states to follow the progress of projects within their state and will enable states to learn from projects elsewhere in the country. As such, California supports DOE requiring that awardees submit annual progress reports and update important metrics. California recommends that DOE include a similar requirement for the Smart Grid Demonstrations. California also recommends that any progress reports and metrics that DOE requires awardees to file be made available to states and be made public to the extent possible. However, certain sensitive information, especially related to cybersecurity measures, should not be made public to safeguard security of the electric grid. California further recommends that data that becomes available through the Smart Grid Investment Grant Program be made public through the Smart Grid Information Clearinghouse, as is already required for the Smart Grid Demonstrations, to make it easier for states to follow the progress and results of all types of DOE funded Smart Grid projects.¹¹

B. Applicable to NOI for Smart Grid Investment Grant Program

The following questions and comments are specifically applicable to the NOI for Smart Grid Investment Grant Program:

1. Give full credit to investments that perform multiple Smart Grid functions.

⁹ American Recovery and Reinvestment Act of 2009, Pub. L. No 111-5, §§1512(c) - (d), 123 Stat. 115. (2009)

¹⁰ NOI at 15.

¹¹ §1304(b)(3)(E) of the EISA requires the Secretary of Energy to establish and maintain a Smart Grid Information Clearinghouse.

The NOI indicates that each application must be submitted in one of five identified categories or areas.¹² California is concerned that requiring applications to fit into one specific category may be too restrictive and could lead to investments that are too narrowly focused. Many Smart Grid investments, by their nature, will be able to simultaneously address multiple areas, so it is important that DOE's selection process recognizes the full range of potential benefits. For example, California is aware of potential projects that involve customer devices that can be used to help improve system reliability, integrate renewable energy and would likely involve an information network component. DOE's Draft Merit Review Criteria appropriately includes a consideration of whether applications "combine multiple applications of smart grid technologies".¹³ California requests clarification as to whether DOE is seeking to fund investments that perform multiple Smart Grid functions, or whether DOE has a preference for narrowly focused projects. We believe the former is more useful than just the latter.

2. Clarify how an entity can show an "institutional or organizational commitment" toward an application.

The Draft Merit Review Criteria include a consideration of the "extent of institutional and organizational commitment".¹⁴ In what manner can an institutional entity show a commitment toward applications?

C. Applicable to FOA for Smart Grid Demonstrations

1. Provide flexibility within the regional demonstrations program to allow for collaboration between investor-owned utilities and publicly owned utilities.

The FOA proposes to split the regional demonstrations funding between investor-owned and publicly owned utility projects. Smart Grid investments can help increase the integration of utilities across a region and create a more robust and ubiquitous Smart Grid. DOE's Regional Demonstrations provide an opportunity to create partnerships that cross jurisdictional lines. California is aware of potential collaborations between investor-owned utilities and smaller publicly-owned utilities in the state. California believes the nation's goals would be better served by allowing for Regional Demonstrations to involve both investor-owned and publicly owned utilities. DOE can provide some balance of funding between investor-owned and publicly owned utility project in terms of its grants, but should not preclude such partnerships.

¹² NOI at 9.

¹³ *Id.* at 13.

¹⁴ *Id.*

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Sincerely,

Handwritten signature of Michael R. Peevey in black ink.

MICHAEL R. PEEVEY
President
California Public Utilities Commission

Handwritten signature of Karen Douglas in black ink.

KAREN DOUGLAS
Chairman
California Energy Commission

cc: Arnold Schwarzenegger, Governor, State of California