CONCENTRATING SOLAR POWER: ADVANCED PROJECTS OFFERING LOW LCOE OPPORTUNITIES

Funding Opportunity Announcement (FOA) Number: DE-FOA-0001186

Webinar Script 10/10/2014

Title Slide: CONCENTRATING SOLAR POWER: ADVANCED PROJECTS OFFERING LOW LCOE OPPORTUNITIES: Hello and thank you for attending the webinar for CONCENTRATING SOLAR POWER: ADVANCED PROJECTS OFFERING LOW LCOE OPPORTUNITIES. My name is Avi Shultz and during this webinar, I will provide a brief overview of this funding opportunity and review process. However, please bear in mind that the content included in the webinar is only intended to summarize the contents of the funding opportunity announcement (FOA).

Slide 2: Therefore, please note that any content within this presentation that appears discrepant from the FOA language is superseded by the language in the funding opportunity. All Applicants are strongly encouraged to carefully read the funding opportunity guidelines and adhere to them. Neither the U.S. Department of Energy (DOE) nor the employees associated with DOE working on this presentation shall be held liable for errors committed by applicants based on potentially incorrect or inaccurate information presented herein.

Agenda: Now I'll move on to the agenda for this presentation. To start things off, I will present an overview on the Concentrating Solar Power (CSP) program and discuss specific areas of interest for this funding opportunity. Again, Applicants should read the funding announcement for more information on the objectives of this funding announcement. I will then briefly go over the application and review process, focusing on the mandatory Concept Paper. There will be a second webinar focused on the Full Application phase after comments from the Concept Papers are released to the applicants. Finally, I will close the webinar by reviewing how an Applicant can submit questions regarding this funding opportunity announcement.

CSP: APOLLO Overview: The CSP program of the SunShot Initiative seeks to support projects that will realize technological innovations that enable power produced by CSP to reach a levelized cost of electricity (LCOE) of 6 c/kWh_e or lower. To reach that goal, the SunShot Vision Study identified specific cost and performance targets for each subcomponent of CSP plants that, together, will drive the cost of CSP to be competitive with conventional methods of power generation. Many of those specific targets are displayed in the figure on this slide. This slide also emphasizes that, while the targets themselves are important, it is also essential that prospective applicants consider how any singular proposed component or innovation will

match the input and output conditions of adjacent subsystems, indicated in this figure as Interfaces A through E, and detailed in the full text of the FOA.

Examples of Topics: This slide shows a number of examples of possible topics that could address the aims of this FOA. These are meant to serve only as examples of topics and applications are by no means limited only to the areas shown here. I would also like to draw your attention to the topics that are specifically not of interest, including projects that would incrementally advance a technology and/or would not allow any of the CSP components to meet the SunShot cost or performance targets.

Technology Readiness Level (TRL): DOE uses Technology Readiness Levels (TRLs) to assess the state of development of a technology, from initial basic research to commercial field deployment. A brief description of each TRL is shown on this slide. Applications to this FOA must propose a project that begins at a TRL of no less than 3 prior to beginning the proposed work. Applications with an initial TRL greater than 3 are also acceptable; however, *all* proposals must plan to advance their technologies by at least two TRL levels by the end of the proposed scope of work in order to be compliant with the requirements of this FOA.

Awards Overview: To accomplish the goals of this funding opportunity, SunShot has made \$25 million dollars of funding available, and anticipates making between 10 and 15 awards for this funding opportunity. The number of awards can vary depending on the amount of money requested by the awards selected for negotiation and funds availability. The funding agreements will take the form of Cooperative Agreements. A Cooperative Agreement is a funding mechanism that means that there will be substantial involvement from DOE throughout the course of a project. More information on this can be found in Section VI.C.10 of the funding opportunity. Awards can have periods of performance of up to three years and have a minimum required cost share of 20%. As described in Section III.B of the funding opportunity, required cost share is at least:

- 20% for R&D activities performed by non-profit recipients and non-profit subrecipients.
- 50% for demonstration and commercial activities performed by non-profit recipients and non-profit subrecipients.
- 50% for all activities performed by for-profit recipients and for-profit subrecipients.

Cost Share: There is often a bit of confusion when people calculate cost share. Therefore, the cost share equations have been displayed here. Take note that the cost share is a percentage of the *Total Costs* for each Task. The Total Task Cost includes the Federal and non-Federal contributions. Not proposing enough cost share, even due to a miscalculation of cost share, can render an application non-compliant. Therefore, Applicants should take care in accurately

determining the cost share of their proposed budget. Another point I would like to emphasize here is that the required cost share set by this FOA is determined for each task by both the type of activity being performed and by the entity performing the activity, *not* by the entity serving as the prime recipient for the total project.

Eligible Applicants: The eligible applicants to this funding opportunity are detailed in the full FOA text in Section III.A, which is summarized on this slide. This FOA is open to both for-profit and non-profit entities, including all National Laboratories and FFRDCs. Also note that Applicants may submit multiple concept papers, but each submission must be a unique and distinct project concept.

Concept Paper Overview: I will now go over the mandatory Concept Paper for applications. The purpose of the concept paper is to provide an early indication of the relevance of the proposal to the FOA. SunShot will make an assessment of each Concept Paper based on the criteria in Section V.A.1 of the funding announcement. SunShot will then either encourage or discourage Applicants to submit Full Applications

An applicant who receives a "discouraged" notification may still submit a Full Application. SunShot will review all compliant and responsive Full Applications. However, by discouraging the submission of a Full Application, SunShot intends to convey its lack of programmatic interest in the proposed project in an effort to save the Applicant the time and expense of preparing an application that is unlikely to be selected for award negotiations.

Reviewer comments from the Concept Paper will be provided to the applicant. The reviewers that are used for Concept Papers may differ from those used for the Full Application phases.

Again, as stated in the FOA, only applicants that submit a compliant concept paper are eligible to submit a Full Application. Being discouraged at the Concept Paper phase does not prohibit an Applicant from submitting a Full Application. However, an Applicant must submit a Concept Paper in order to submit a Full Application.

Concept Paper Contents: The Concept paper is broken into two sections: One section is for the Technology Description and one section for the Team Description. The Technology Description section is limited to 3 pages and the Team Description is limited to 2 pages. I've included the specific components that are requested in the two sections in these slides. The 3-page technology description should address the novelty of the proposed concepts and its potential impact. The team description should describe the ability of the team to support the proposed research plan.

Please review Section IV.C of the funding opportunity for more information on the required content of the Concept Paper.

Key Points: When constructing an application, please ensure that all the submitted materials adhere to the formatting criteria and page lengths stated in the FOA. Do not submit applications that are in excess of the stated page limits.

Of course, triple check your entries in Exchange and make sure that you click the submit button.

Also, when using the EERE Exchange system, please note that if you make any changes to your application after it has been submitted, the application becomes un-submitted in Exchange. If this occurs, the Applicant needs to ensure the Concept Paper is resubmitted before 5pm Eastern Time on November 26th by clicking the submit button again.

Mandatory Concept Paper Deadline: Concept papers are due November 26th at 5pm Eastern Time. Applicants are strongly encouraged to submit all application documents 1-2 days prior to the deadline to avoid and/or resolve any issues that may occur with EERE Exchange. If an Applicant has difficulties with EERE Exchange, the EERE Exchange support team can be contacted by email at <u>EERE-ExchangeSupport@hq.doe.gov</u>, as described in section 7 of the FOA.

Concept Paper Review Criteria: Concept papers will be reviewed according to the specific review criteria listed in Section V.A.1 of the FOA. One criterion focuses on impact and the second focuses on scientific merit. Applicants are strongly encouraged to consider these criteria when constructing an Application, as they will be used by the reviewers when evaluating submitted Applications.

Concept Paper Review Process: After the Concept Paper review is complete, the applicants will be provided with the reviewer comments. SunShot expects to release these comments no later than December 19th, 2014. Full applications are due about two months later on February 20th, 2015. Please bear in mind that Concept Paper reviewers and Full Application reviewers may not be the same. As SunShot will provide a second webinar after the Concept Paper phase, which is scheduled for January 7th, the Full Application criteria will not be discussed at this time.

Timeline: I will now briefly go over the application timeline. Submitted concept papers will be reviewed and will either be encouraged or discouraged. Full applications will be due at 5pm eastern time on February 20th, 2015. A second webinar, focusing on the full applications will be held on January 7th. After all submissions are received, Full Applications will be reviewed by at least 3 expert reviewers. The applicant will then have a short period of time (the funding announcement states at least 3 business days) to prepare a Reply to Reviewer Comments. The replies are then considered along with the applications when making selections.

A subset of Applicants may be selected for pre-selection clarification meetings. Selection for clarification does not mean that the Applicant has been selected for an award and is for the purposes of modifying the application. Applicants may only receive a couple days' notice before such clarifications, which may take the form of written responses to questions, video or conference calls with DOE representatives and/or merit reviewers, in person-meetings, or presentations.

Questions: Any questions about this FOA need to be sent to <u>CSPAPOLLO@ee.doe.gov</u> so that they can be answered in an equitable manner and posted online in the FAQ section for this funding announcement in EERE exchange. Please send all questions to this email address and EERE will attempt to answer questions within 3 business days.

The script and slides for this webinar will be posted in EERE Exchange shortly in the section for this FOA.

Thank you and have a nice day.