

Technology to Market Concept Paper Informational Webinar

February 12, 2015

- 1) Good afternoon everyone and welcome to our webinar. Thank you for your interest in the U.S. Department of Energy's efforts on renewable energy and energy efficiency. You are joining us for the Informational Webinar for Applicants and other Interested parties for the **SunShot Technology to Market (Incubator Round 10, SolarMat Round 3, SunPath Round 2)** Funding Opportunity Announcement, or FOA, which was issued on 1/29/2015. We will be covering the basic aspects of the Funding Opportunity Announcement during this webinar.

Before we begin, I'd like to draw your attention to the email address on the left hand side of this cover page. This is the official mailbox to direct all of your questions during the entire FOA process. Please do not contact EERE individuals directly with questions. All questions received at this mailbox are posted publicly at the Q&A section of the FOA page on EERE Exchange in an anonymous way. The official answers to your questions will typically also be posted within 3 business days. Please be careful not to submit any language that might be business sensitive, proprietary or confidential.

We will not be doing a live Q&A period at the end of the webinar. Please type your questions as they come up, being cognizant not to include any language that might be business sensitive, proprietary or confidential. We will be posting all Q&As to EERE Exchange soon after the webinar. There may be questions that require further discussion with EERE staff and will not be addressed immediately, but they will be posted once the proper response is determined. Please check EERE Exchange in the next few days as the answer will be posted there.

Also, just to be clear, there are no particular advantages or disadvantages to the application evaluation process with respect to participating on the webinar today. Your participation is completely voluntary.

Let's get started.

- 2) READ SLIDE
- 3) READ SLIDE
- 4) This slide shows the anticipated schedule for the FOA. The FOA has already been posted, and we are conducting the FOA Concept Paper Informational Webinar now. Please note that this presentation will focus on the Concept Paper—we will cover all remaining requirements for this FOA, such as Full Applications, during the webinar on April 1. The next deadline to be aware of is the optional Letter of Intent, which is due tomorrow by 3 PM ET. The mandatory concept paper is due by 3 PM ET on February 24.
- 5) EERE's Evaluation and Selection Process is shown in blue here. EERE will review Concept Papers, Replies to Reviewer Comments (which we will cover later in the presentation), and Full

Applications. The gray boxes represent the actions that apply to applicants throughout the FOA process.

As stated here, we plan on making notifications regarding selection for award negotiation in August of this year.

- 6) The agenda for this presentation is as follows: READ SLIDE
We encourage you to have a copy of the FOA in front of you for reference as we go through the presentation.
- 7) EERE expects to make approximately \$45 million of Federal funding available for new awards under this FOA subject to the availability of appropriated funds. The average award amount is anticipated to range from \$500,000 to \$10 M. There is no minimum or maximum number of awards anticipated.
EERE intends to fund mostly cooperative agreements under this FOA. Cooperative Agreements include Substantial Involvement by EERE, which we will discuss in detail later in this presentation.
- 8) First a high level description of this Funding Opportunity
READ SLIDE
- 9) This graphic depicts a path of product development. The tiers of this funding program are meant to take a product from Proof of Concept to Pilot Manufacture (if applicable, hardware) or product launch (if applicable, soft cost solutions). This is a product development process based on the use of stage gates, such as milestones and Tiers, to gauge product development.

It should be noted that an applicant can apply into any of these tiers without having gone through the previous tier (provided they are not repeating a tier with an idea which they have already been awarded to develop). In addition, to move from one Tier to the next, applicants will need to re-compete for funding. Applicants are not required to move sequentially through the tiers. If the applicant determines it is in their best interest to skip a tier or tiers they may do so. It is up to the applicants to determine which tier is most applicable to them.

- 10) So, what is the funding opportunity meant to accomplish?
READ SLIDE
- 11) READ SLIDE

Pictorial representations of the 2 primary ways to drive significant improvement can be seen in the FOA.

Additional detail on the rationale for this funding opportunity can be found in the funding opportunity announcement.

- 12) Since 2011, the T2M programs have focused on achieving the primary goal of the SunShot Initiative: achieving a levelized cost of electricity (LCOE) of solar energy in the U.S. to a subsidy-free \$0.06 per kilowatt hour (kWh) by the end of the decade. At the SunShot cost target, solar energy will match or even be below the cost of electricity generated by traditional means. However, as the SunShot Initiative cost targets are achieved, an entirely new set of challenges

will arise. SETO wants to partner with American businesses to bring products and solutions to market that achieve the SunShot cost goals and solve the next set of challenges preventing the ubiquitous use of solar power. By doing so, a plateau in solar deployment can be avoided, resulting in the continued expansion of solar energy use in the United States.

This figure shows how achieving SunShot price goals will lead to increases in domestic deployment. But for solar to become ubiquitous, additional advancements are needed, and this funding opportunity hopes to address these challenges.

- 13) This slide describes who is eligible to apply to this funding opportunity. For standalone applicants, only for-profit entities are eligible to apply. For project teams, projects must be led by for-profit businesses. This means that a for-profit business must be the prime recipient and, this is important to note, incur at least 60% of the expenditures under the project. Projects which do not have the prime recipient incurring at least 60% of the project expenditures will be deemed non-compliant.

Currently, we are working on modifying the eligibility criteria for subrecipients. We hope to publish a modified version of the funding announcement to EERE Exchange very soon.

For more details regarding these eligibility requirements, please review this slide and see Section III.A of the FOA.

- 14) This slide depicts the topic areas and technical areas of interest for hardware, which include topics related to design, production, monitoring and testing, and grid integration. Review this list, but also please note that this list is not meant to be exhaustive.
- 15) This slide depicts the topic areas and technical areas of interest for non-hardware projects, which include topics related to customer acquisition, financing and contracting, permitting, inspection, interconnection, installation and performance. Again, review this list, but also please note that this list is not meant to be exhaustive.
- 16) The FOA also specifies topic areas that are specifically not of interest for this funding program. These include: undifferentiated products, projects that lack influential impact from federal funds, and projects that propose to be re-funded for an idea that does not advance a projects' technology readiness level. Review this list carefully in the FOA to ensure that your topic area does not fall in the scope of an area that is specifically not of interest.
- 17) Additionally, here are some more areas that are specifically not of interest in this funding opportunity: entities that require continued financial support, Concentrating Solar Power and/or HVAC and water heating applications projects, projects that do not tie to the grid, and fundamental battery/storage materials research. The Solar Energy Technologies Office is not authorized to fund storage materials research. Again, review this list carefully when you are considering submitting a concept paper.
- 18) This slide provides a list of the hardware technology tiers that are included in this funding opportunity. Tiers are distinguished by different levels of cost share (between 20-50%), funding amount (up to \$500k – \$10M), project period (up to 12 months – 24 months), and technology

readiness level. Review these tiers carefully before selecting the tier that your concept paper might fall into.

- 19) This slide describes the FOA tiers for Solar Manufacturing Technology, SunPath, and Soft Cost (Non-Hardware) tiers.

It is incumbent on the applicant to determine which Tier they are best suited for based on the type of innovation they are proposing and its state of maturity. Please know that DOE reserves the right to move projects between Tier levels at the time an applicant is selected for award negotiation.

I'd also like to note that selection for an award is based on merit with no minimum or maximum number of awards per tier.

EERE may issue awards in one, multiple, or none of the award tiers described in these two slides.

- 20) Now we will discuss the topic of submitting multiple applications. Prime applicants may only submit one Full Application for each Tier, and each application must be for different and distinct products, processes and/or technologies.

Each application must be its own unique, stand-alone project with no interdependencies on other applications. In other words, one application should not be contingent on work being done in another application for its success.

Additionally, if an applicant uploads two applications to a single tier, only the most recent submission will be reviewed.

- 21) Due to its importance I will read the next two slides.

READ SLIDE

- 22) READ SLIDE

- 23) Letters of Intent are not required as part of the application process. Letters of Intent will be used by EERE to plan for the merit review process. Letters of Intent for this funding opportunity are due tomorrow, Friday February 13 by 3 PM ET

- 24) Concept Papers are required to be considered for this funding program. Concept Papers are brief descriptions of the proposed project or technology and consist of one cover page, a four page (maximum) project description, one page letters of support and one summary slide. The concept paper phase allows applicants to submit their ideas with minimal time and expense. EERE will provide feedback on the proposed project so the Applicant can make an informed decision whether to expend additional resources to prepare a full application. Carefully review Section IV.C of the FOA for detailed information regarding the concept paper.

If an applicant fails to submit an eligible Concept Paper, the applicant is not eligible to submit a Full Application.

Concept Papers must be submitted by February 24, 2015 before 3:00 pm ET through EERE Exchange.

EERE will provide applicants with either an encouraged or discouraged notification. A “discouraged” notification conveys EERE’s lack of programmatic interest in the proposed project. An applicant who receives a “discouraged” notification may still submit a Full Application.

- 25) For the concept paper phase, applicant should focus on performance metrics and meeting SunShot Goals. Specifically, applicants should specify how target outcomes of their projects support SunShot goals in terms of dollars per Watt and/or Levelized Cost of Energy. Applicants should also describe aspects of their project that include: what will be produced, when it will be done and how it will be quantifiably verified.

26) READ SLIDE

EERE will provide applicants with (1) either an “encouraged” or “discouraged” notification, and (2) the reviewer comments.

Please note that regardless of the date applicants receive the Encourage/Discourage notifications, the submission deadline for the Full Application remains the date stated on the FOA cover page

27) READ SLIDE

- 28) All required submissions must come through EERE Exchange. EERE will not review or consider applications submitted through any other means. There is also a User’s Guide for Applying to DOE EERE FOAs on EERE Exchange.

29) READ SLIDE

30) READ SLIDE

- 31) Each Tier specifies a different level of cost share required from the applicant. This slide shows how cost share is calculated. Additional details on this can be found in the funding announcement. Please note that a budget is not required as part of the concept paper submission.

- 32) We often get asked how proprietary and confidential information contained in applications is handled.

READ SLIDE.

- 33) I would like discuss how software developed during this award is handled. (Read Bold Paragraph) For relevant awards, this is discussed in greater detail at the time of award negotiation.

34) READ SLIDE

DOE will be posting copies of these slides on EERE Exchange. Written answers to questions posed during this webinar will also be posted once they have been answered.

This concludes our presentation. Thank you and have a great day.