

Questions and Responses for the CSI RD&D Solicitation #2: Improved PV production technologies and Innovative business models

- Q1 We have plans to establish a manufacturing line to produce solar wafers in California. Is this grant applicable to equipment development for solar wafer production?
- A: Improved production technologies must help reduce costs or improve performance. The proposal would have to address the extent to which this is accomplished, the benefits to California ratepayers and the value of the work relative to the requested funding.
- Q2: To receive CSI RD&D funding, does it matter if the inverter or PV panels are not made in the USA?
- A: This would be eligible; however preference is given to California-based companies or products.
- Q3: Page three of the solicitation contains the example of energy storage "capable of working with smaller solar systems". Please provide guidance on what constitutes "smaller solar systems" (5 MW or under 1 MW)?
- A: There is no specific definition for "smaller solar systems". The program's intent is to support distributed solar generation on the customer-side of the meter.
- Q4: With the forthcoming CSI thermal program due to begin Q1 2010, do purely solar water heating proposals (i.e. not PV hybrids) qualify for this solicitation?
- A: Yes, solar thermal is an eligible technology. According to Public Utilities Code Section 2851 (c) (1) the intent of CSI RD&D was to explore "solar technologies and other distributed generation technologies that employ or could employ solar energy for generation or storage of electricity or to offset natural gas usage."
- Q5: (a.) If a proposal requires development of a new tariff or tariff rules, will that impact its selection? (b.) What is the time frame in which the CPUC and utility would act on creating such a tariff or tariff rules? (c.) What level of detail should be included in a tariff or rule proposal? (d.) Must support of the tariff or rule proposal / concept be secured from the IOU and the CPUC prior to the proposal being submitted?
- A: (a.) Projects that develop new tariffs or rules are certainly appropriate for this solicitation. (b.) There is no established time-frame for action on a tariff or tariff rules. We suggest that you engage the IOUs in this work and outline a strategy and schedule in the proposal. (c.) Significant detail to communicate the rationale and benefits for the tariff along with the process and partners for implementation.

A stronger proposal would include a utility with a willingness to investigate different tariffs. (d.) For a proposal on a new tariff or rule, it is not required that you secure IOU support before submitting a proposal, however the proposal will be much stronger if this support is secured since the IOUs are going to be the entities filing at the Commission for approval of a new tariff.

Q6: Would an investor pledge of capital to match CSI awarded grant funds be a valid means of demonstrating part or all of the required 25% match funding? Do these funds need to be deposited into a trust account pending the outcome of the grant application process?

A: Yes, an investor pledge of capital can be used as match. These funds do not need to be deposited into a trust account but will require a commitment letter from the investor documenting the match funding. However, match funds are scored on the basis of source and security. Match funds that are deposited in a trust will generally be scored higher than match funds secured only by a letter of commitment.

Q7: Is a project that is still in the early stage of initial prototype system development suitable for this solicitation or is the focus limited to technologies that have already been largely developed?

A: All of the early-stage research funds have been allocated to the Helios project, so no funding remains for early-stage research or prototype development. The CSI RD&D program focuses on activities that can quickly provide benefits to California within the nearer-term (e.g., 2-5 years). However, because the allocation of funds is a target and not a firm percentage, a solicitation which had an element of research would not be necessarily excluded.

Q8: Please define what is meant by "distributed generation"? Would ground mounted systems between 1 - 10 MW qualify under this definition?

A: Systems between 1 - 5 MW would technically qualify as distributed generation, but the focus of this program is to foster success of the California Solar Initiative, which has a focus of customer-side of the meter and projects under 1 MW. RD&D and projects focused on a larger size need to explain how they would further the CSI -focused solar market in California.

Q9: Will a proposal that has a scope focused on solar thermal and the integration with HVAC be appropriate for the CSI RD&D Program?

A: Yes, but keep in mind that this is an RD&D Program so the project must have an RD&D element.

Q10: Does the project have to be located in California? If not, is there priority given to projects located in California?

A: The project does not have to be located in California, but priority will be given to projects or companies located in the state. All projects must provide benefits to California ratepayers. Refer to the scoring criteria for more information.

Q11: Will a proposed project to design, prototype, build and validate an invention to improve concentrating solar power be appropriate for this solicitation?

A: The CSI RD&D Program does support concentrating solar power. However, the targeted amount of research funds under the program has already been awarded. Consequently, validating an invention that has already been prototyped would need to fall within another aspect of the program in order to be eligible. Please note that the CSI RD&D Program has a stated preference for near-term activities that support the CPUC goals for the CSI Program.

Q12: In the solicitation particular reference is made to "innovative hybrid solar technologies". Will the CSI thermal program have scope for hybrid technologies to claim both electrical and thermal rebates?

A: The CSI RD&D Program is not a rebate program. Questions about rebates should be directed to the CPUC staff. The CSI Thermal program is under active consideration in Rulemaking R.08-03-008 at the CPUC.

Q13: Must all projects funded by the CSI RD&D Program be specific for solar power generated on the customer-side of the power meter, or will the CSI RD&D program also fund technologies that are intended for installations that are on the Utility-side of the meter?

A: The focus of this program is to foster success of the California Solar Initiative, which has a focus of customer-side of the meter and projects less than 1 MW. RD&D and projects addressing any other aspect will need to explain how they would further the CSI -focused solar market in California.

Q14: Will the CSI RD&D Program fund a demonstration project for a new approach to solar panel installation, including the fabrication of new tools and fixtures needed to implement the new installation approach? Would the Program also fund the use of this new approach to install a small solar installation using the new approach, including the cost of the panels themselves? Are there any specific limitations regarding the use of funds for capital equipment?

A: CSI RD&D Funding can be used to demonstrate a new approach to panel installation or for the fabrication of tools for the new approach to installation.. Equipment purchases are allowable as long as it is necessary for the project and a lower cost option to rent or lease is not available. Equipment purchases over \$5,000 are allowable under certain conditions that are spelled out in the Sample

Grant Agreement, Section 5.3. The Sample agreement is posted on www.CalSolarResearch.ca.gov

Q15: Do eligible technologies include tools and/or systems to reduce the cost of solar installation that will thereby support the expansion of cost-competitive solar technologies?

A: In general, yes, however the applicant will need to make the case how the funding requested for these tools and systems and how their development will expand the market adoption of solar in California.

Q16: From the proposal it does not appear that there are any restrictions on what the funds can be used for. For example, can funding be used for capital equipment, materials, supplies, travel, and wages and salaries? If so, what are the limits?

A: The CSI RD&D Program funds may be used for all of these expenses as long as the expenses are a necessary part of the RD&D project. There are some limitations on types of expenses. Please see the Section 5 – Amount and Authorized use of Grant Funds in the sample Grant Agreement posted on the CalSolarResearch.ca.gov website for details on these restrictions. Proposals will be evaluated based on the reasonableness of the requested funding for each of these areas. Funding requests for amounts that are not reasonable or cost-competitive will receive a low score and will not be recommended for funding.

Q17: Proposal Scoring Criteria #7 discussed utility participation in a project. How will these criteria be scored if no utility participation is required for the project? Will the proposal be given a score of 10 for this criterion?

A: In most instances, utility direct or indirect participation in a project will be beneficial to a project. Most projects will have some impact on the utility, and a utility's level of interest in the project, the project results, or assistance in making the project a success will be considered by the review panel. A lack of utility participation can certainly be explained in the proposal if it is not relevant to the particular project. The proposal may not necessarily receive a score of 10 for this criterion. It will be up to the scoring committee to assess the appropriateness of utility participation and provide a score for this.

Q18: What is the period of performance for a grant project?

A: The term of the grant project is two years.

Q19: The budget template does not have an indirect cost allocation. Please clarify.

A: Proposers are not asked to provide an indirect cost break-down in their proposal. Indirect costs should be shown as "fully loaded" in the cost of personnel.

Q20: 'Other direct costs' category includes 'Equipment over \$5,000'. Are there any regulations/restrictions regarding equipment?

A: Details regarding restrictions and limitations on 'Equipment over \$5,000' are outlined in the Sample Grant Agreement that can be found on the www.CalSolarResearch.ca.gov website.

Q21: Are subcontractors allowed?

A: Yes, subcontractors can be used for your project. The proposal should include a list of all subcontractor firms and relevant background on the individual staff members as well as specific responsibilities and funds being requested or match funding provided.

Q22: Can national labs, companies, individuals or customers be included as part of the team for the proposal?

A: Yes. The CSI RD&D Program encourages partnerships to ensure strong market connection.

Q23: What is the general guidance of hourly rate and total of work hours for this 2 year project?

A: The hourly rate and number of hours will depend on the project and must be reasonable for each individual skill level and experience. In general, rates should fall in line with industry standards for the type of work being done. The reasonableness of the proposed hourly rate and number of hours will be evaluated through the scoring process. A proposal that includes an unreasonable number of hours or hourly rate will receive a low score and will not be recommended for funding. Proposers should provide a justification of hourly rates if available. Proposers' hourly rates should not exceed rates charged to other governmental entities.

Q24: The solicitation has a two-page limit on project personnel. Is there a preference for resumes or biographies?

A: Either a targeted resume that provides and highlights the relevant experience or a detailed biography is acceptable.

Q25: How will applicants be viewed if they submitted a proposal under the first grant solicitation and also submitted a proposal under this solicitation?

A: The two solicitations have different focus areas and are separate. It will neither help nor hinder you to submit a proposal under both of these solicitations.

- Q26: What is meant by 'existing energy storage technologies' at the top of page 2-3?
- A: Existing refers to energy storage technologies that are past the research phase. What is to be noted here it that the program is looking for nearer term results and not early stage or prototype development. The competitiveness of your proposal would depend on the magnitude of the benefits that can reasonably be expected over the time-frame of the funding.
- Q27: Can applicants cross target areas? Please clarify how to submit a proposal that cuts across two of the topic areas?
- A: Yes, an applicant can propose a project that includes both target areas. This should be noted on the Grant Application Cover Page (Exhibit A) section b. Solicitation Target Area (check those that are appropriate). This should also be discussed, as appropriate, in the Project Summary, Project Goals, Project Performance Objectives and Scope of Work.
- Q28: Will the proposals submitted in response to this solicitation be posted publically?
- A: The CPUC will not post or publicly distribute the proposals. However, it is recommended that applicants do not submit confidential or proprietary information.
- Q29: How will any intellectual property (IP) that is developed using CSI RD&D Funding be handled? Are there royalty or repayment requirements?
- A: Please see section 12 (Rights of Parties Regarding Deliverables, Data and Intellectual Property) in the Sample Grant Agreement for a complete discussion of this. The sample Grant Agreement can be found on the www.CalSolarResearch.ca.gov website.
- Q30. One of the key principles of the CSI RD&D Program is the focus on issues that benefit CA that would not be funded by others. What does this mean?
- A. Specific needs and issues exist in California, in terms of the solar energy market, which may not exist in other states or countries. Also, California ratepayers fund this program and they should see direct benefits from selected projects. For example, electricity peak demand as well as the adequacy of the transmission and distribution system is problematic in the state and solar RD&D can provide potential solutions to these issues. Funding research on these types of California-specific issues may be of lesser interest to the Federal Government or international organizations but certainly appropriate for the CSI RD&D Program.
- Q31. Is concentrating PV or other concentrating solar technologies eligible for funding?
- A. Yes.

- Q32. What is the CPUC looking for in terms of virtual net metering?
- A. The types of projects of interest could include new and innovative approaches to parsing-out of costs and benefits of solar across different entities. Proposals may also propose tariffs or rate structures to expand this concept more broadly. In general, the CPUC is looking to solicit those ideas with the highest potential to transform the solar market.
- Q33. Are there limitations on the number of proposals that can be submitted by a company or entity?
- A. An individual may only submit one proposal. Multiple proposals are can be submitted from companies, laboratories or organizations, however each proposal must have a different principal researcher.
- Q34. Can you provide examples of entities that may provide match funding?
- A. Match funding may be available from the federal or state government (American Recovery and Reinvestment Act of 2009, the California Energy Commission's Public Interest Energy Research Program, DOE, NYSERDA, other states) PV manufacturers or other stakeholders, non-profit entities, universities or other research organizations.
- Q35. For market connection, is it useful for the proposal to include letters from customers that are interested in the products?
- A. Yes, and in addition, please also include an explanation of the products and broader path to market for the research. Explaining clearly how your project will have a connection to the market will strengthen your proposal. Sample questions to answer in addressing the market connection of your project would be: how will it be used my marketplace? Can I demonstrate that the marketplace actually wants this? Who will use it? Why will they use it? What will happen to the market for your product if your project is successful?
- Q36. Can you clarify the difference between Solicitation #1 and Solicitation #2?
- A. The difference in the two solicitations is on the areas of focus. The first solicitation was looking to support projects that would help facilitate the integration of significant penetration of PV on the electricity grid. The current solicitation has two general focus areas – improvements in production technologies and innovative business models.

Q37. Will proposals that do not develop intellectual property (IP) be preferred over those that do develop IP?

A. There is no preference given to projects that do (or do not) develop IP. Details regarding how IP will be handled with awarded grants are covered in other questions in this document.

Q38. What documentation is needed for match funding?

A. Documentation can include letters of commitment of either cash or in-kind services, notice of receipt of a funding award or any other acquired commitment from a partner or stakeholder. A strong proposal will include full documentation of committed match funding.

Q39. What are considered California-specific issues?

A. California-specific issues are those that may be unique to the state. California has more grid-connected solar PV than any other state in the country, and as a result has overcome initial PV penetration issues, but is poised to potentially experience issues associated with much higher levels of PV penetration. These include peak electricity demand, transmission and distribution constraints, meeting greenhouse gas reduction goals, etc. For additional information on energy issues facing the state, you may wish to review the California Energy Commission's Integrated Energy Policy Report, which can be found at: http://www.energy.ca.gov/2009_energy_policy/index.html. Also the CEC's PIER Renewable Energy Technologies Program: Research Development and Demonstration Roadmap <http://www.energy.ca.gov/2007publications/CEC-500-2007-035/CEC-500-2007-035.PDF>

Q40. If my project builds on an existing product or technology, should I contact the manufacturer and include them in the proposal?

A. This decision is yours to make.

Q41. Will there be networking opportunities with this solicitation?

A. There is no specific networking opportunity provided, however a list of the attendees for the CSI RD&D solicitation webinar is posted on the CalSolarResearch.ca.gov. Feel free to contact the CSI RD&D Program Manager if you think we could help facilitate making a connection with a particular entity.

The following organizations have made available a lead contact person for soliciting interest in CSI RD&D proposals. Keep in mind that utilities may be partners in proposals, but they may also be proposers themselves.

PG&E - Matt Heling MGH@PGE.com

SCE - Jim Stevenson james.stevenson@sce.com

SDG&E - Cherif Youssef cyousef@semprautilities.com

CAISO – Dave Hawkins dhawkins@caiso.com

Q42. Will there be specific feedback on each proposal that is submitted?

A. Applicants that submit proposals that pass the initial screening can request written comments on the strengths and weaknesses of their proposal. Proposals that fail the initial screening can also request the reason(s) why their proposal did not pass.

Q43. Will technologies that have been implemented and are successful in Europe and other areas but have yet to make a mark in the US be considered for funding?

A. Yes, projects that propose demonstrations of these technologies in the California market are appropriate.

Q44. Will the audio and video be available for download later?

A. The audio along with presentation visuals is available at the CalSolarResearch.ca.gov website at this location:
<http://www.calsolarresearch.ca.gov/pre-bid-webinar-recording-solicitation-2.html>

Q45. Will the pre-bid webinar presentation be available?

A. Yes, the presentation can be found at the CalSolarResearch.ca.gov website at this location: http://www.calsolarresearch.ca.gov/images/stories/documents/pre-bid_webinar_solicitation-2.pdf

Q46. Does it strengthen a proposal to delineate match funding by work task?

A. Yes, the more information and documentation that is provided for match funding, the stronger the proposal.

Q47. Which has a stronger likelihood for support – a proposal at the low end of the funding scale that is a key technology subsystem or a proposal at the high end of the funding scale for a full product?

A. There is no specific guidance provided here. A proposal with a funding request at the high end will be expected to deliver significant benefits relative to a proposal at the lower end of funding. Proposals will be evaluated based on the funding requested relative to the benefits that are expected from the proposed research. Also, applicants may submit a tiered proposal which offers a smaller deliverable/technology for a lower amount of funds and an enhanced or full product technology for a higher amount of funds.

- Q48. Is partnering with municipal utilities as attractive to the program as partnering with investor-owned utilities?
- A. The investor-owned utilities represent more customers and hence a greater share of the market and because the program is focused on benefits, proposals that make inroads to a greater portion of the market should do better. However, partnering with the municipal utilities in California is certainly allowable. Proposals may wish to note the reasoning behind their choice of partnerships.
- Q49. Would a project exploring the feasibility of a large-scale implementation of an existing PV technology in a unique way fit within the scope of this grant solicitation?
- A. Yes.
- Q50. Please provide contact information for the appropriate utility staff to contact for potential partnering?
- A. PG&E - Matt Heling MGH@PGE.com
SCE - Jim Stevenson james.stevenson@sce.com
SDG&E - Cherif Youssef cyousssef@semprautilities.com
CAISO – Dave Hawkins dhawkins@caiso.com
- Q51. What types of expertise do the external review committee members have?
- A. The experience of external review members is varied. Reviewers represent both the public and private sector and have experience in engineering, economics, solar energy, environmental sciences, architecture, finance and public policy. The review committee has members with a background in making RD&D grant awards.
- Q52. Match criteria favors proposals that could be funded in other ways and may not need these funds. Is consideration of risk for the project balanced by a consideration for the effectiveness of these funds to enable projects that would not happen otherwise?
- A. The CSI RD&D Program examines match funds from the perspective of one of the key program principles: providing funding for projects that directly benefit California, and that may not be funded by others. As such, there is a balanced consideration for funding projects that represent good leverage of CPUC funds and funding projects that benefit California and may not be funded by others.

Q53: Will you be notifying applicants if their proposals do not pass initial screening?

A: No; applicants will only be notified of the results when the CPUC posts the resolution adopting the RD&D awards.

Q54. If my proposal is for software as service – what are the IP issues with this?

A. Please review the IP requirements listed in the terms and conditions as specified in the sample grant agreement, which can be downloaded at:
www.CalSolarResearch.ca.gov

Q55. In the answer to Question 27 from the webinar, the instructions on completing the application for crosscutting projects is to ‘check those that are appropriate’ while the instructions under Item b in Exhibit A clearly state to check the one box that is most representative.

Is it possible to get clearer guidance on how to apply with crosscutting applications?

A. Applications with crosscutting projects should check multiple boxes.