**Questions and Answers**

**GFO-22-306**

**Precipitation enhancement and Environmental Research for Hydropower Generation (PEER-Hydro)**

**May 9, 2023**

The following answers are based on California Energy Commission (CEC) staff’s interpretation of the questions received. It is the Applicant’s responsibility to review the purpose of the solicitation and to determine whether or not their proposed project is eligible for funding by reviewing the Eligibility Requirements within the solicitation. The CEC cannot give advice as to whether or not a particular project is eligible for funding, because not all proposal details are known.

**Administration/Process**

**Q1:** **What is in the scope of work of GFO-22-306 - Precipitation Enhancement and Environmental Research for Hydropower Generation, and would these documents be made available for public comment, or are you following silence procedures?**

A1: The solicitation manual contains detailed descriptions of the solicitation focus and what is expected for applicants to include in their proposed scope of work. This and other information to be submitted in the proposal can be found on the solicitation’s webpage at: <https://www.energy.ca.gov/solicitations/2023-03/gfo-22-306-precipitation-enhancement-and-environmental-research-hydropower>. It is unclear what is meant by “these documents” and “silence procedures.” After a winning application is developed into a funded agreement for approval at a CEC Business Meeting, supporting materials (e.g., scope of work) are publicly posted with the Business Meeting agenda. Applications that are not funded are not posted publicly but are available upon request any time after the Notice of Proposed Awards is released.

**Q2: Must all grant funding be spent in California?**

A2: It is **not** a requirement for all grant funding to be spent in California, although funds spent in California can affect an application’s score. Please consult with the Solicitation Manual section I.L, *CEC Funds Spent in California* for complete details. Projects that maximize the spending of CEC funds in California will receive points as indicated in the table below.

|  |  |
| --- | --- |
| **Percentage of CEC funds spent in CA vs Total CEC funds requested****(derived from budget Attachment)** | **Percentage of Possible Points** |
| >60%  | 20% |
| >65%  | 30% |
| >70% | 40% |
| >75%  | 50% |
| >80% | 60% |
| >85%  | 70% |
| >90% | 80% |
| >95%  | 90% |
| >98% | 100% |

**Q3: Do you accept applications from companies outside of California?**

A3: Applications from companies outside of California can be accepted as long as they fulfill the Eligibility Requirements outlined in Section II.A.1 of the Solicitation Manual. However, there are scoring criteria points based on funds spent in California. Please review Section I.L. and the scoring criterion 6 on pages 39-40 in the Solicitation Manual for complete details.

**Q4: Where can we find the recorded meeting?**

A4: Slides and the recording from the pre-application workshop can be found at: <https://www.energy.ca.gov/event/funding-workshop/2023-03/pre-application-workshop-gfo-22-306-precipitation-enhancement-and>.

**Q5: With the Group 1 funding minimum and maximum, is it anticipated just one project will be funded?**

A5: As indicated in Section I.D.1. of the Solicitation Manual, CEC anticipates a single award for Group 1. However, as provided in Section I.D.3 of the Solicitation Manual, CEC reserves the right to increase or decrease the available funding and the minimum/maximum award amounts, allocate any additional or unawarded funds to passing applications, in rank order, and reduce funding to an amount deemed appropriate if the budgeted funds do not provide full funding for agreements.

**Q6: You mentioned public utilities are not allowed to apply. Does this include PG&E?**

A6: Investor-owned utilities (IOUs) in California, like PG&E, are eligible to apply. As described in Section II.A.1 of the Solicitation Manual, “this solicitation is open to all public and private entities with the exception of local publicly owned electric utilities.[[1]](#footnote-2) In accordance with CPUC Decision 12-05-037, funds administered by the CEC may not be used for any purposes associated with local publicly owned electric utility activities.”

**Q7: Is there a preference for working with investor- or non-investor-owned utility companies?**

A7: It is unclear to staff what is meant by the word *preference* in this question; as indicated throughout the solicitation manual, the purpose of the EPIC program is to benefit California IOU ratepayers and EPIC-funded projects must provide IOU ratepayer benefits. Applicants must explain how the proposed project will benefit California IOU ratepayers and should provide clear, plausible, and justifiable potential benefits (see Scoring Criteria 3 on page 38, for example). It will be up to the applicant to describe how those benefits are achieved, and whether that means working with IOUs, non-investor-owned utility companies, or other entities. However, as stated in Answer 6, funds for this solicitation may not be used for any purposes associated with local publicly owned electric utility activities.

**Q8: Can the same software tools be used but applied for different locations or in different ways across separate applications? Or would the use of the same software tools be considered overlap in this context?**

A8: As described in the solicitation manual on page 3: “If an applicant submits multiple applications that address the same project group, each application must be for a distinct project (i.e., no overlap with respect to the tasks described in the Scope of Work).” Therefore, applicants submitting proposals using the same software tools at different locations or for different applications must show how each proposed research project will not only advance science and technology but also be unique from other proposals the applicant submits.

**Q9:** **The anticipated start and end dates suggest a 2.5-year project duration.  Are you open to longer project lengths, for example, to bring in a PhD student, a 3-year program sponsorship would be beneficial. Is this something you would consider?**

A9: The dates given in the Key Activities Schedule (Section I.E.), indicate that the end and start dates are anticipated. Longer project lengths are allowed, and it is up to the applicant to explain why additional project time beyond those anticipated dates will be beneficial to the project’s success. Please note that projects cannot extend beyond the estimated liquidation date for the EPIC 4 funds, which is 6/30/2028.

**Q10:** **Does this GFO allow graduate student support (which includes tuition coverage)?**

A10: Applicants decide on their team composition and are required to fill out the Project Team Form (Attachment 3). Graduate students can be part of the team. The Direct Labor and Fringe Benefit costs for graduate student activities can be part of the budget. Please review the applicable EPIC Grant Terms and Conditions at <https://www.energy.ca.gov/research/contractors.html> for details concerning the tuition remission.

**Q11: What type of funds can be considered “matching funds”?  For example, can state university funds be applied toward the match? Or can other state or even Federal funds be used for match classification?**

A11: Details of match funding and scoring of match funding can be found in Section I.K and Section IV.F of the Solicitation Manual. Please review Section I.K. of the Solicitation Manual for details on what “match funds” include, the requirements concerning spending of the match funds, providing commitment letters, ensuring consistency of pledged match funds in all parts of the application, etc. Note that match funds do not include CEC awards or EPIC funds received from other sources.

**Q12. Are computing resource costs leveraged at partnering institutions allowable to be in-kind matches?**

A12: Please see the answer to Question 11.

**Q13: Can you provide more context and/or example of what the competition matrix would look like for this type of research-based proposal (this is in the Project Narrative template form)? Can you define what 'units' mean in this case?**

A13: The Competition Matrix in the Project Narrative (Attachment 2) is given as an example of how to describe, in a table form, the manner in which an applicant’s proposed approach/technology/methodology compares to state-of-the art approaches/technologies/methodologies. Applicants are asked to provide a relevant means of comparing the competitive advantages. The example provides “units”, but what these “units” actually are will depend on the proposed approach and the identified attributes that make comparison with state-of-the-art possible.

**Q14: Does an application require both a commitment letter and a support letter?  Can a commitment letter also meet the requirements of a support letter?**

A14: As indicated in the Solicitation Manual (page 27 and 28) “A commitment letter commits an entity or individual to providing the service or funding described in the letter. A support letter details an entity or individual’s support for the project.” and “all applicants much include at least one support letter from a project stakeholder…”. All applicants must include at least one support letter.

Commitment letters are required if an entity or individual (including the applicant) is providing a service or funding, i.e., any match funds pledged, a site commitment for a pilot, subcontractor providing service and/or a project partner making contributions. At least one commitment letter is a requirement for applying to satisfy the match funding requirement. As described in Section I.D.2 of the Solicitation Manual, “Match funding is required in the amount of at least 5% of the requested project funds.” In addition, as described in Section I.K of the Solicitation Manual, “All applicants providing match funds must submit commitment letters, **including prime and subcontractors**”.

**Q15: We are a non-profit Federally-funded Research and Development Center that is not under the Department of Energy, and we follow uniform guidance for all non-profits. The GFO states that to apply we must accept the contract terms and conditions outright, however, we wanted to know if in fact there is any opportunity for negotiation?**

A15: Addendum 2 makes edits to the solicitation manual on pages 20 and 30. These changes state that applicants that, by law, cannot agree to the terms and conditions listed on page 20 without negotiation can apply and request to negotiate terms. The CEC retains the sole right to refuse to agree to any terms changes. Also note that the electronic application submission system used for this solicitation (the ECAMS system) will require the applicant to agree to certain certifications before submitting an application, including certifying the applicant will conduct the proposed project according to the terms and conditions without negotiation. Applicants that, by law, cannot agree to the terms and conditions will not be penalized for agreeing to the ECAMS system certifications.

**Q16: Is there any possibility that the deadline for submissions could be extended, due to the fact that given the recent flooding from the record snowfall in the region, many water management agencies who are potential partners for this program have been quite busy and less available to respond to inquiries for partnership/matching**?

A16: As stated in Addendum 2, the submission deadline has been rescheduled for June 7th, 2023. Addendum 2 has been posted on <https://www.energy.ca.gov/solicitations/2023-03/gfo-22-306-precipitation-enhancement-and-environmental-research-hydropower>. Please note that with the change to the submission deadline, other dates in the Key Activities Schedule have shifted as well.

**Q17: Do we write ourselves in on any recipient section as an organization or as the lead PI?**

A17: Application authors use their organization’s name as “applicant” and “recipient” in the forms they submit.

**Q18: With regards to Attachment 8, Reference and Work Product Form, who all will need to submit references? Only the primary PI or also co-PIs and other staff?**

A18: The recipient/applicant and each subcontractor are required to submit references as indicated in the Reference and Work Product From (Attachment 8). The listed reference firm or organization could be contacted to provide information to the application scoring team about the performance of the applicant or subcontractor and could highlight performance of leading team members (such as PI’s, co-PI’s, PMs, etc.) in relevant and applicable past or ongoing projects. As indicated in the Reference and Work Product Form (Attachment 8), please identify **three** references for the recipient and **two** for each subcontractor, using the table in the form for each reference. Please also see the response to Question 17.

**Q19: In the Project Narrative, should we keep the sub-criterion as the main section of the writing? (Technical Merit, Technical Approach)**

A19: It is not fully clear what is meant by “keep the sub-criterion as the main section in the writing”. However, it is up to the applicant to decide whether the sub-criterion text provided in Attachment 2, Project Narrative Form, should be part of the submitted Project Narrative write-up, or whether the applicant will refer to the listed sub-criterion in another manner. Nonetheless, the applicant must ensure that in the Project Narrative write-up they respond to each of the sub-criteria listed in the Project Narrative Form (Attachment 2).

**Q20: Do references count towards the page number?**

A20: References do count towards page number within Attachment 8, Reference and Work Product Form. As described in the solicitation manual on p.22, **Section III.A** regarding page limits recommendations: “**Reference and Work Product Form** (Attachment): **one** page for each reference, **two** pages for each project description.”

**Q21:** **In Attachment 3, Project Team Form, it says, “Attach a resume for each individual (two pages maximum, printed double sided);” is this referring to 2 pages, front and back - so a 4 page resume- or 1 page, double sided for a 2 page resume?**

A21: In Attachment 3, Project Team Form, the applicant can submit a 2-page resume, printed front and back for a total of 4 pages per team member.

**Q22: In the Scope of Work, what parts are required for the application and what parts are post-award? The language in Section III seems to indicate this is not to be filled out until after the award is received (e.g. contractual obligations to be completed).**

A22: Please provide a completed Scope of Work Template (Attachment 4) as it will be considered part of the application and “completeness in submitting all the information requested in each attachment will be factored into application scoring” (solicitation manual, p. 24). The Scope of Work “identifies goals, objectives, and deliverables, details the work to be performed, and aligns with the information presented in the Project Narrative” (solicitation manual, p 38). Concerning what is to be included in the Scope of Work, please follow the instructions given in the Scope of Work Template (Attachment 4), as well as the places in the solicitation manual that indicate what should be described in the Scope of Work.

**Q23: In Scope of Work, where do task write ups go? Do they go into Section III General Project Tasks?**

A23: In the Scope of Work Template (Attachment 4), it is indicated that “the language for III. Task 1 General Project Tasks is standard for each agreement.” Please do not revise this task. Instead, the write-ups for proposal-specific Technical Tasks should be added into “IV. Technical Tasks”. In this section, instructions in blue text are provided and three examples of Technical Task write-ups are given.

**Q24:** **In the Scope of Work, the document does not provide any guidance on what qualifies for the required 5% to be spent on technology/knowledge transfer activities. Can you please define this and will the following be eligible to meet that 5%: progress and final reports; stakeholder presentations, meetings, and workshops; cost to prepare for stakeholder meetings; CEC required meetings; Other.**

A24: In the Scope of Work Template (Attachment 4) the “Task [TBD-2] Technology /Knowledge Transfer Activities” provides the text of what the recipient shall achieve, as well as the products that will be produced. This is what the 5% of funding to be spent on technology/knowledge transfer activities should be spent on, at a minimum. This task is mandatory and must be included in the applicant’s Scope of Work. Mandatory products (such as Kick-off, CPR, TAC, and Final meetings, the Progress Reports, Final Report, etc.) that are listed in the subtasks of **III. Task 1 General Project Tasks** in the Scope of Work Template (Attachment 4) are not eligible to meet the 5% funding that needs to be spent on technology/knowledge transfer activities.

**Q25: Is the Project Schedule, Attachment 5, submitted with the application?**

A25: Yes, as indicated in Section III.C. Application Content in the solicitation manual, the Project Schedule (Attachment 5) must be submitted with the application.

**Q26: In Attachment 8 for References and Work Product Form, it does not specify who fills out Section Two. Is this just the recipient or also the subcontractors?**

A26: The applicant should fill out Section Two: Work Products of the Reference and Work Product Form (Attachment 8). As indicated in the text in the attachment, the information provided should reflect past projects and recent publications of the applicant or any member of the project team.

**Technical**

**Q27: Who will evaluate the technical merit of the proposals?**

A27: As described in Section IV.A. of the Solicitation Manual, applications will be evaluated by an Evaluation Committee “that consists primarily of CEC staff. The Evaluation Committee may use technical expert reviewers to provide and analysis of applications.” Reviewers may also come from outside the CEC.

**Q28:** **Do you have any information about current cloud seeding operations (such as location, report, etc.) for hydropower generation in California?**

A28: The CEC does not supply information on current cloud seeding operations for hydropower in California. Applicants are encouraged to research the areas necessary for submitting their application. The reference documents in the Solicitation Manual (Section I.J.) and the presentation materials from the precipitation enhancement workshops could provide additional information.

**Q29:** **Are there "specific cloud seeding efforts" you want this call to focus on? By "specific cloud seeding efforts" do you mean you want the research partnered with and/or focused on existing cloud seeding efforts in California?**

A29: There are no specific cloud seeding efforts that the CEC is directing applicants to focus on. However, as described on page 6 of the solicitation manual, “successful applicants must demonstrate a clearly articulated and scientifically justified approach that describes how the research will lead to enhanced validation of the efficacy of specific cloud seeding efforts”, whereby the applicant has identified the specific cloud seeding efforts that are relevant and related to their proposed research. The solicitation is focused on supporting research that will improve the science and technology of cloud seeding as now practiced in California.

**Q30: Do you want evaluations of existing (ground-based and/or aerial) seeding efforts, or something more general cloud seeding research? Or a bit of both?**

A30: The proposal should discuss those aspects of current cloud seeding science and technology that the proposed project will address and advance. Whether the proposed research will investigate existing current cloud seeding technology and research, general research, or a mix of both, as indicated in the Solicitation Manual on page 6, “successful applicants **must demonstrate**:

* + A clearly articulated and scientifically justified approach that describes how the research will lead to enhanced validation of the efficacy of specific cloud seeding efforts;
	+ A well-articulated approach to the assessment of benefits of cloud seeding using meaningful metrics (e.g., $/acre-foot) and including, but not limited to, hydropower generation and water resources relevant to the electricity sector; and
	+ Expertise in coordinating with relevant precipitation enhancement and electricity sector experts and stakeholders, including descriptions of coordination efforts in a clearly articulated approach."
1. A local publicly owned electric utility is an entity as defined in California Public Utilities Code section 224.3. [↑](#footnote-ref-2)