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Group 1: Improving Productivity and Flexibility of Existing Geothermal Facilities	
Q.1	We are planning to submit an application pursuant to GFO-19-303 with respect to a project in Group 1. Accordingly, our project must comply with the eligibility requirements of Section II.B.2.a, including a beginning technology readiness level (TRL) of at least 4 and an ending TRL of at least 6. The type of system that we will begin with has been under development for some years, and has achieved a TRL of at least 4, and our project will consist of a number of related improvements that will work together in such a system to achieve both a reduction in cost and an increase in performance of at least 20%, each, although such a system does not yet exist. It is anticipated that the project will demonstrate the potential for a payback period of less than 5 years. It is also anticipated that, at the end of the project, the ending TRL of the system will be at least 6. Would such a project be eligible, assuming that it meets the other eligibility requirements of GFO-19-303?
A.1	To have achieved a TRL of at least 4, a basic prototype should have been tested in the laboratory. To end the project with a TRL of at least 6, there needs to be a field demonstration of at least a subsystem model. The 20% cost reduction or performance improvement should be relative to conventional technology that is currently used in the industry, not to an earlier version of the new technology. The applicant should make the determination if the project meets the requirements and fully explain in the narrative how it meets those requirements.
Q.2	Referring to Group 1 research objective #4 “Improve reservoir monitoring or management tools or techniques”: Would the CEC consider a technology that could improve potential heat extraction from existing geothermal projects by 100% or more as being responsive to the intent of the research objective? Are there required TRL levels associated with this technology?
A.2	To be responsive to the intent of that research objective, you would have to justify how the technology would help improve management of the geothermal resource, for example, to maintain pressure, temperature, or chemistry of the reservoir. All group 1 projects must begin with a TRL of at least 4 and end the project with a TRL of at least 6.
Q.3	Referring to Group 1 research objective #5 “Improve the capability of geothermal power to operate flexibly” Would the CEC consider the concept of a hybrid closed-loop geothermal system coupled with a large-scale thermal energy storage system as being responsive to the intent of the research objective? Are there required TRL levels associated with these technologies?
A.3	Yes, that would fit the intent of that research objective. All group 1 projects must begin with a TRL of at least 4 and end the project with a TRL of at least 6.

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Group 1: Improving Productivity and Flexibility of Existing Geothermal Facilities	
Q.4	For a Group1 proposal including a disadvantaged community, would it be OK to include educational activities/participation of university/college students?
A.4	The application has to justify how those activities are advancing the innovation of the project and helping in future deployment. For criteria 10, applicants have to explain how the project is benefiting disadvantaged communities. We typically encourage collaboration. The Scope of Work has a task for technology transfer or outreach efforts where such activities could fit but it needs to be tied to the project. See A.59.
Q.5	Group1: Are existing and depleted Oil & Gas fields considered as an Existing Geothermal facility?
A.5	No. An existing geothermal facility refers to an existing geothermal power plant.
Q.6	Is it required for Group 1 projects to have any relationship at all to lithium?
A.6	No.

Group 2: Improving Process and Technology for Lithium Recovery	
Q.7	Group 2 requires a \$5000/ton LCE and 5-yr payback. But because Group 2 provides for pilot testing of systems or subsystems (and lithium extraction is only 1 or 2 technical steps out of a 6 or 7 part process), the bulk of parameters for these calculations would not be relevant for testing of a subsystem. How would CEC advise calculation of these parameters for a subsystem test proposal?
A.7	The payback period is a calculated value of what would be expected from that technology in a complete commercialized system. It is not required to actually produce it at that price in the pilot demonstration. See A.51.
Q.8	Do Group 2 proposals require lab test results for actual geothermal brine, or is a synthetic brine acceptable?
A.8	Test results using actual brine or synthetic brine would both be acceptable to show that the technology has been successfully demonstrated previously in the laboratory. However, proposals that include testing using the actual geothermal brine will be given preference.

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Group 3: Deployment and Demonstration of Lithium Recovery from Geothermal Brines	
Q.9	I am concerned that this solicitation is limited to facilities with a power purchase agreement (PPA) with an Investor Owned Utility (IOU) (PG&E, SCE and SDG&E). The IOUs have not been contracting for geothermal energy, it's been the Publicly Owned Utilities (POU) such as LADWP and SCPAA. The IOUs use the formula of "least cost least cost," not "least cost best" fit. This model has been detrimental not only to the transmission system but also to existing and expansion of geothermal development. The POUs must also comply with all the state laws for renewable energy and low carbon which is why they are interested in geothermal. SDG&E does not have even 1 megawatt of geothermal in their system!
A.9	The source of funding for the solicitation is from the EPIC program. EPIC funding is generated through a fee that ratepayers in the IOU territories of PG&E, SCE, and SDG&E are required to pay. It has been a traditional requirement from the start of the EPIC that Technology Demonstration and Deployment projects have to be within an IOU territory or with an entity that has a PPA with an IOU. See A.15.
Q.10	The Solicitation requires that the "demonstration must be located at a California geothermal power plant that has a power purchase agreement with a California electric IOU." See Solicitation, page 17. This requirement is onerous and unfair because it forces applicants to work with the handful of geothermal plants that would essentially enjoy monopoly power (i.e. - they have the power purchase agreement with IOUs) to choose a preferred applicant. This disparity in power creates unfair competition because the geothermal power plants are the gate keepers and are not required to work with anyone, including innovators with break-through technology that can materially benefit the California public. This creates opportunities for unfair competition caused by 'blocking out' interested applicants (again - the geothermal plants are not required to provide access to anyone). Will the CEC remove or modify this requirement to ensure equal access for all applicants?
A.10	See A.9.
Q.11	We are concerned about the requirement for an applicant to locate its demonstration only at those geothermal power plants which have a power purchase agreement with a California based IOU. This seems to create an unnecessary constraint on the development of promising technology. As long as the demonstration is equally adaptable at all geothermal power plants, will the CEC remove the requirement that the demonstration be located only at those few geothermal power plants which have those agreements?
A.11	See A.9.
Q.12	What types and categories of projects does the requirement for a PPA with an IOU apply?
A.12	Only Group 3 projects require a PPA with a California electric IOU.

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Q.13	Which existing California geothermal power plants have a power purchase agreement with a California electric IOU?
A.13	The Energy Commission does not directly track the status of power purchase agreements and recommends that applicants check with the CPUC. See CPUC website: https://www.cpuc.ca.gov/rps/
Q.14	Would geothermal test sites that purchase power from a California IOU be acceptable, or must the site be selling power to a California IOU?
A.14	The solicitation requires that demonstration sites in group 3 projects have a power purchase agreement with a California electric IOU.
Q.15	The Solicitation includes a requirement that a Group 3 project be located at a geothermal power plant. See Solicitation, page 17. While lithium recovery technologies will use brine from geothermal power plants, they should not be required to be so closely associated with a plant or an entity operating a plant as to necessitate co-location. A co-location requirement is unnecessary, does not reflect the reality of the deployment of lithium recovery technologies and fails to let commercial market conditions inform the best brine source or sources for a project. In addition, Group 3 lithium recovery projects must involve scaling up a system to at least one-tenth of a commercial scale and must include the full process to produce battery grade lithium carbonate or lithium hydroxide. Such projects are expected to require a significant footprint and if required to be co-located at a geothermal power plant may require a lease or other access agreement with the plant owner. Requiring co-location will place a lithium recovery project at a disadvantage during a negotiation for a lease or other access agreement. In addition, a lithium recovery project could actually be sited to serve multiple geothermal power plants. In such a scenario, a recovery project should seek an optimal location that may be near to but not within one or more geothermal power plants. Revising to require a Group 3 project to demonstrate that it is located to serve a nearby geothermal power plant or plants will strike an appropriate balance between project applicants and power plant owners. Will the CEC clarify that a Group 3 project need not be located at a geothermal power plant?
A.15	See addendum 1, page 17 of solicitation manual. “The demonstration must be located at a <u>obtain its geothermal brine directly from the geothermal power plant through a pipeline, but it is not required for the demonstration to be located on property owned by a geothermal facility. The applicant must provide a letter of support from each geothermal facility that will be providing brine for the demonstration. The letter should identify the approximate amount of brine that the facility will be providing and should show the commitment level of the facility to the project. The demonstration must obtain at least 60% of its brine from a</u> California geothermal power plant that has a power purchase agreement with a California electric IOU.”

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Group 3: Deployment and Demonstration of Lithium Recovery from Geothermal Brines	
Q.16	During the Dec 4, 2019 pre-application workshop in Sacramento, in response to a question, a CEC representative indicated that it may require that a Group 3 Project be integrated with, rather than located at, a geothermal power plant. The representative also explained that the CEC will provide a written explanation that may differ from that offered at the workshop. Requiring a Group 3 project to be “integrated” is problematic because the geothermal power plant is essentially given the authority to choose a “winning” lithium recovery technology with which to integrate. This would be counter to the underlying purpose of this very important innovation grant, i.e., spurring innovation to meet California's green energy statues. The decision to select an appropriate Group 3 project should be based solely on an applicant’s response to the solicitation and not whether it has been able to negotiate an “integration” agreement. Will the CEC please clarify that a Group 3 project need not be located at or integrated with a geothermal power plant?
A.16	See A.15
Q.17	Group 3 mandatory requirements state that “systems are expected to have previously been demonstrated on a pilot scale” as well as “show that the technology has been successfully demonstrated previously on a pilot scale.” See Solicitation, pages 16 and 17. It is not clear what the CEC intends by the phrases “previously demonstrated on a pilot scale” and “demonstrated previously.” Can the CEC please provide clarification on what “previously demonstrated” (or “demonstrated previously”) means? Put another way, what must an applicant submit to show that a technology has been successfully demonstrated on a pilot scale?
A.17	The phrase “successfully demonstrated previously on a pilot scale” simply means that for the system or technology to be eligible for funding, it must have been demonstrated beyond the laboratory and have collected performance data at a pilot scale as defined. The applicant is expected to explain how it was demonstrated and what the results were. See A.49
Q.18	The Solicitation requires a demonstration that a system in the field be scaled up to at least one-tenth of commercial scale. See Solicitation, page 16. The phrase “commercial scale” is ambiguous and applying a one-tenth factor has a tendency to exacerbate this ambiguity. Generally, project proponents focus on whether a project or system demonstrates that it may be scaled up in such a manner as to be commercially viable. The requirement that a Group 3 project demonstrate the potential to achieve an estimated production cost of less than \$4,000/metric ton achieves the CEC’s goal that a project demonstrates that it may be economically scaled up. We suggest that the CEC delete the requirement that a Group 3 project demonstrate that a system in the field be scaled up to one-tenth of commercial scale and instead rely on the production cost requirement. In the alternative, what criteria might the CEC advise an applicant to consider in order to meet the demonstration of some fraction of commercial scale?

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A.18	It is up to the applicant to define exactly how large commercial scale is but in general, commercial scale would be expected to produce at least 10,000 – 15,000 metric tons of LCE per year. A 1/10 th commercial scale demonstration should be capable of producing at least 1,000 – 1,500 metric tons of LCE per year.
Q.19	One of the pre-requisites for a Group 3 submission is that the technology has previously been demonstrated through a successful pilot. Is there a relationship between the “pilot scale” as used in this mandatory requirement and the 1:10 scale used elsewhere in the requirements?
A.19	See A.18, A.49.
Q.20	What is the minimum and maximum capacity of the project to be demonstrated in LCE (in order to achieve 1/10 th commercial scale)?
A.20	See A.18
Q.21	For group 3, does the requirement to produce lithium carbonate or lithium hydroxide need to be done at 1/10 th commercial scale? Or could you produce lithium chloride at that scale and produce a smaller quantity of lithium carbonate?
A.21	For group 3, the targeted product is either lithium carbonate or lithium hydroxide produced on the targeted scale. Applications targeting lithium chloride will not qualify for funding under this group.
Q.22	If no group 3 projects receive a passing score, will the CEC consider reallocating those funds to the other groups?
A.22	There is a possibility that we could move some of the funding to other groups.

Groups 1 & 2	
Q.23	For Group 1 and Group 2 projects, if there is a field demonstration or small-scale pilot component to the project, is there a requirement that the project is located in California?
A.23	Yes it must be located in California.
Q.24	For Group 1 and Group 2 projects, the manual states that they must fall within the "applied research and development stage - what if the project may be characterized as closer to the "demonstration and deployment" stage?

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Groups 1 & 2	
A.24	There is some overlap between applied research and development and technology demonstration and deployment. For instance, we allow pilot demonstration within applied research and development stage. For groups 1 & 2 the applicant must show that the project can fit into the applied research and development program area. See A.48.

Groups 2 & 3	
Q.25	The solicitation should consider all critical minerals, not just lithium. There are many minerals required to build a battery besides lithium. The California Geological Survey has identified 31 of the 35 critical minerals in the state but their analysis does not include the potential of geothermal brines at the Salton Sea or any of the other geothermal resources in the state.
A.25	While other minerals are also very important, the emphasis of this grant funding opportunity is to develop and test technologies for lithium extraction. However, the solicitation does not prohibit projects from including the extraction of other minerals as a byproduct, as long as lithium carbonate or lithium hydroxide is the main targeted product. See A.26.
Q.26	With respect to Groups 2 and 3, can the costs and payback estimates include revenue from the co-extraction of other metals in addition to lithium?
A.26	Yes, as long as the costs and payback calculations take into account all costs associated with co-extraction.
Q.27	Making battery quality lithium chemical products, especially hydroxide, is very challenging - more challenging than making technical grade products for example. Would the CEC be interested in projects that seek to process lithium intermediates from California and other resources into high quality battery chemicals that is decoupled from primary extraction? For example, a plant in California to make LiOH*H2O from technical grade Li2CO3 that is produced at a California facility? For example, this could vastly simplify lithium processing required at geothermal lithium plants, enabling lower CAPEX and lower technology risk.
A.27	For the purposes of this solicitation the project cannot be decoupled from the lithium extraction process.
Q.28	How did you come up with the \$4000/ton and \$5000/ton numbers in a somewhat fickle lithium market?
A.28	The production cost targets are set to be in a range that is competitive with the production costs of lithium in existing commercial projects, such as lithium extraction from salar brines and lithium extraction from hard rock.

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Groups 2 & 3	
Q.29	Both Group 2 and Group 3 projects require an applicant demonstrate the potential for the technology to achieve an estimated production cost of less than \$5,000/metric ton (for a Group 2 project) or \$4,000/metric ton (for a Group 3 project) of lithium carbonate equivalent. What items are included in calculating production costs? E.g., do production costs include: raw materials; manpower; utilities; supplies & maintenance; packaging; credits for by-products; or any other components?
A.29	The calculation should be done in a manner that closely follows the NI 43-101 reporting guidelines and resembles economic analysis that is conducted for pre-feasibility studies for mineral recovery projects.
Q.30	Logically Group 2 work should be completed at TRL 6 before proceeding to carry out Group 3 activities and advancing to TRL-8. Thus, a Group 3 statement of work could depend on the Group 2 results. If we submit separate proposals in response to the call for Group 2 and for Group 3 work, would the CEC, after review, allow us the flexibility to renegotiate an integrated statement of work and budget, rather than two separate contracts?
A.30	No. Each application must fit into one of the project groups and the CEC will not combine different applications into one project. One proposed project cannot be dependent on the results of another proposed project and each project should be ready to start in a reasonable amount of time after business meeting approval in mid-2020. See A.56.
Q.31	Is it required for a pilot demonstration to use actual geothermal brine or is synthetic geothermal brine acceptable?
A.31	Pilot demonstrations using actual brine or synthetic brine would both be acceptable. However, applications that include testing using the actual geothermal brine will be given preference.
Q.32	Can you define pilot scale in terms of the amount of LCE recovered or water processed?
A.32	No, the pilot scale is not defined in that way. See A.49.

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General Questions	
Q.33	<p>The scoring criteria includes rules for matching funds. See pages 35 to 36 of the Solicitation. The calculation of the scoring criteria is not always clear. Section 9.a. Match Funds states: Points for this criterion will be evaluated based on the ratio of proposed Cash and In-Kind contributions using the Matching Scoring Table). What exactly is meant by the “ratio” calculation? For example, if cash contribution to matching funds is zero dollars, but in-kind contribution is \$1M, is the ratio calculation: \$0 cash / \$1M in-kind = 0 points?</p> <p>Please clarify how this ratio is being calculated, and the weight applied to cash versus in-kind, especially since cost calculations from in-kind services can be inconsistent from one participant to the next, whereas cash (being hard cash) is clear in its value.</p>
A.33	<p>Points for match funding are divided into two parts. In criteria 9a, points are given for the quality of match funding and in 9b, points are given for the amount of match funding above that which is required. Criteria 9a awards points based on the percentage of the match funds that are cash match. To calculate the percentage of cash match, use this formula:</p> <p style="text-align: center;">Cash Match/Total Match = % of Cash Match</p> <p>Then use the table on page 35 of the solicitation manual to look up the amount of points given. If \$1M are cash match and \$1M are in-kind match, then the percentage of cash match would be 50% and would be given 3 points. If there are no cash match funds, then it would result in 0% and 0 points would be given for criteria 9a.</p>
Q.34	<p>Is it the intent of the CEC to make multiple awards to projects within each group to all applicants who have demonstrated a promising proposal? In other words, we would like to confirm that the CEC will not employ a “Winner-Take-All” approach, and will instead support multiple submissions within each group. Can you confirm this and provide some insight into the methodology to be used to split awards within a group?</p>
A.34	<p>The highest scoring applications in each group are recommended for funding until funding has been exhausted. The number of awards will depend on the amount of requested funds of the highest scoring applications in each group. See page 8 of the solicitation manual for the minimum and maximum amounts that can be requested in each category. See A.35.</p>
Q.35	<p>Are the awards “all or nothing” or can an application be partially funded?</p>
A.35	<p>The highest scoring projects in each group are funded fully. If there is not enough money left over to fund the next project fully, we may choose to offer partial funding for that project.</p>

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Q.36	Past awards have been used to develop technologies which are being deployed in the Salton Sea and marketed for other projects outside of California. Presumably success of non-California projects facilitated by California organizations will return wealth to California, creating jobs and expertise within the state. Are points allocated towards development of technologies which can develop lithium process expertise in California, can be deployed on California resources, but also international lithium resources too?
A.36	There are no points allocated specifically to international benefits. See criteria 4 on page 33 and criteria 7 on page 34 of the solicitation manual.
Q.37	Given that the Policy Drivers for this initiative are SB100, SB32, and B-55-18, does the CEC scoring criteria include additional bonus points for projects, including subsystems that are not merely carbon neutral, but are in fact carbon negative?
A.37	There are no bonus points specifically for carbon negative technologies, however, the applicant could highlight that feature to strengthen the narrative under criteria 2 and 4.
Q.38	The Electric Program Investment Charge (EPIC) Standard Grant Terms provide both the CEC and the CPUC a no-cost, non-exclusive, transferable, irrevocable, royalty-free, worldwide, perpetual license of the intellectual property for governmental purposes. What are the limitations of governmental purposes?
A.38	Generally, using something for a “governmental purpose” is use of that thing in furtherance of the government’s services or responsibilities, either expressed or implied. See also A.39.
Q.39	The State of California has led the nation in taking an active role in advancing green energy initiatives. In that regard, the State has made it its business to be heavily involved with green energy initiatives, partnering with public and private stakeholders whenever possible. With this seemingly broad and compelling mandate, what are the meaningful limitations on the ability of the State to grant no-cost, non-exclusive, transferable, irrevocable, royalty-free, worldwide, perpetual license of either the intellectual property developed, or the pre-existing intellectual property needed to practice it?

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A.39	<p>The licenses are transferable only to load-serving entities. The intellectual property that may be licensed to load-serving entities is limited to analytical tools and models that can be used to inform distribution planning and decision-making that benefits electric ratepayers.</p> <p>“Intellectual property” means: (a) inventions, technologies, designs, drawings, data, software, formulas, compositions, processes, techniques, works of authorship, trademarks, service marks, and logos that are created, conceived, discovered, made, developed, altered, or reduced to practice with Agreement or match funds during or after the Agreement term; (b) any associated proprietary rights to these items, such as patent and copyright; and (c) any upgrades or revisions to these items.</p> <p>“Works of authorship” does not include written products created for Agreement reporting and management purposes, such as reports, summaries, lists, letters, agendas, schedules, and invoices.</p> <p>See also A.38. See EPIC Standard Grant Terms and Conditions, pages 22-23. https://www.energy.ca.gov/sites/default/files/2019-09/EPIC_Standard_Grant_Terms_and_Conditions.pdf</p>
Q.40	<p>As it relates to the ownership of intellectual property necessary to a particular project to be demonstrated, the General Terms which must be adopted by all award recipients include provisions related to indemnification by the recipient, as well as requirements that the recipient recognize royalty, licensing and certain march-in rights of the State of California. There does not appear to be any requirements, however, that the award recipient affirm that it has title to all intellectual property necessary for a demonstration, or that it must include documentation of authorization for its use through a license agreement. What specific affirmation will the CEC require applicants to make to ensure that all patent owners’ rights are protected? How will the CEC confirm that an applicant has secured the necessary right or license to use IP to conduct a project?</p>
A.40	<p>If the project is selected, the recipient will fill out an intellectual property form and submit it to the CEC to confirm pre-existing intellectual property. If the intellectual property belongs to another entity, they must be a subcontractor or partner that is involved with the project or the recipient must have secured the necessary rights or license to use the intellectual property. Make sure you read the T&C’s and understand the royalties’ provision. When the project is selected it is important to declare to the CEC your pre-existing intellectual property to protect it.</p>
Q.41	<p>Can an applicant receive points in Scoring Criteria 1 if they have not previously entered into an agreement with the Energy Commission?</p>

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A.41	Yes. On page 31 of the solicitation manual under criteria 1 in the last paragraph it says: “No/minor performance issues (13-15 points): No/minor performance issues are characterized by compliance with agreement requirements while demonstrating no/minor performance issues, or the applicant has not received funds from the Energy Commission (e.g., contract, grant, or loan) through an agreement with the Energy Commission.”
Q.42	What about the deadline for a mail in copy?
A.42	The deadline for hard copy submittals are the same as electronic submittals. The application must be received by the CEC no later than the date and time of the deadline. Postmarked by the due date is not adequate.
Q.43	My company was incorporated in Nevada. Do I need to have a California subsidiary to make the application?
A.43	Companies applying for this solicitation need to be registered with the California Secretary of State. There is not a requirement for applicants to be a California subsidiary.
Q.44	Will you publish the attendee list? How do online attendees provide their information?
A.44	The attendee list is posted on the solicitation web page: https://www.energy.ca.gov/solicitations/2019-11/gfo-19-303-geothermal-energy-overcoming-technology-hurdles-and-enabling If you provided your information to WebEx, when you joined the meeting, it was included in the list.
Q.45	Does the CEC have any objections to a geothermal power producer engaging with multiple teams to support a demonstration at their site?
A.45	No. They are encouraged to do so.
Q.46	Are you in any way encouraging existing Geothermal power plants to participate and allow demo on their locations?
A.46	Yes. The CEC encourages geothermal power plants to participate in this solicitation.
Q.47	Do you have a list of California Geothermal power plants?
A.47	The link to a list of geothermal power plants is here: https://www.energy.ca.gov/sites/default/files/2019-05/geothermal_list.xls
Q.48	Please elaborate on the difference between "Applied research and development" stage and "technology demonstration and deployment" stage.

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A.48	The applied research and development stage, which includes activities that support pre-commercial technologies and approaches that are designed to solve specific problems in the electricity sector at applied lab-level or pilot-level stages. By contrast, the technology demonstration and deployment stage involves the installation and operation of pre-commercial technologies or strategies at a scale sufficiently large and in conditions sufficiently reflective of anticipated actual operating environments to enable appraisal of the operational and performance characteristics and the financial risks. See the EPIC 2018-2020 Triennial Investment Plan: https://ww2.energy.ca.gov/research/epic/17-EPIC-01/
Q.49	Can you quantify the difference between pilot and commercial scale? Do you have specific numbers?
A.49	The pilot scale falls between the laboratory scale and commercial scale. It is generally intended to verify the design and operation of a basic prototype in the TRL stages of 5 or 6. Commercial scale is the full-scale production facility that has completed a TRL of 9.
Q.50	Does a pilot demonstration have to be located onsite or near a geothermal facility?
A.50	It is preferred that a pilot demonstration be located near a geothermal facility but it is not required.
Q.51	What is the concept behind payback?
A.51	The payback period refers to the amount of time it takes to recoup the investments in the technology based on net cash flow (meaning that all costs are taken into consideration). In other words, it is the time it takes for the monetary savings from the improvement to equal the cost of the improvement. See A.52.
Q.52	The payback is the benefits vs the cost of the improvement right? It's not the benefits relative to the CEC's investment or the CEC's investment plus cost share. Is that correct?
A.52	The payback period is calculated based on the anticipated cost of deployment or implementation when the technology is commercialized. It is not based on the CEC's investment or the total cost of the R&D project. See A.51.
Q.53	When an award is made, are the funds paid out at the beginning of the project or over time?
A.53	The funds are paid on a reimbursement basis. As the project incurs costs, the grant recipient will send the CEC invoices that will be reimbursed.
Q.54	If there are multiple entities involved in a project, does one entity file the application? Is there only one applicant?

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A.54	Each application has to be for a unique project. If you are a group of several organizations working on one project, one entity will be the applicant and the others will be subcontractors or project partners. If the project is selected, the applicant (prime contractor) will be the entity in contract with the CEC. The T&C's will be between the CEC and the prime but there is a flow down provision requiring the prime to flow down the T&C's to subcontractors.
Q.55	Is there an advantage or disadvantage to filing one application as a group with expertise from different entities or are you better off applying alone?
A.55	It depends on the type of project. In general, there are advantages to having a broad range of expertise on the team. Criteria 5 evaluates the credentials and qualifications of the project team which includes key personnel of prime and any subcontractors so having experts from different entities can strengthen your project.
Q.56	If you are on a team that has two innovations that are distinct but associated, would it be allowable to put them in the same application?
A.56	It would be allowable to have two separate innovations on the same application, making it one project. It is up to the applicant to decide if it would be beneficial to include both innovations in the same project. As long as the innovations are distinct, it would be allowable to submit separate applications for two separate projects. The separate projects cannot be dependent on each other to succeed. It may be the case that only one of the projects is awarded.
Q.57	In the video on Empower Innovation, it was suggested that there was a place there for teaming and collaboration. Is that where that occurs if people want to connect after this meeting?
A.57	Yes. Empower Innovation helps to create connections to people and organizations working on similar projects. The website for Empower Innovation is https://www.empowerinnovation.net .
Q.58	Have you had conversations with USDOE about coordinating funding resources so we can get the most out of the combination of funding?
A.58	We don't have a formal discussion about combining funding at this point. That is a topic for future consideration.
Q.59	Can you expand on how you are evaluating the disadvantaged communities' criteria? Especially for applications that have multiple parts to the team.
A.59	In general the proposal has to describe how disadvantaged communities will benefit from the project. Benefits could be different forms (economic, environment, etc.). The solicitation manual describes in more detail what is needed on page 36. See A.60.

Questions & Answers
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General Questions	
Q.60	How are disadvantageded communities defined?
A.60	These are communities defined as areas representing census tracts scoring in the top 25 % in CalEnviroScreen 3.0. https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30
Q.61	Are foreign companies allowed to apply for funding?
A.61	Yes. Refer also to Section II.A. Applicant Requirements in the solicitation manual.