

Questions and Answers for the Multi-Source Facility Demonstration Project Solicitation Applicant Teleconference

On July 21, 2015, the California Air Resources Board (ARB) held the Multi-Source Facility Demonstration Project Applicant Teleconference to answer questions regarding the Fiscal Year (FY) 2014-15 Grant Solicitation. Staff encourages applicants to read through this document, as ARB has provided more written detail in these responses to stakeholder questions than what was discussed during the teleconference. The questions and answers below are grouped by topic.

Grantee and Project Team Eligibility

1. Reference Section VII, Page 6: Would a non-profit organization with offices and personnel in California be eligible to submit a proposal in response to this Solicitation?

Answer: Yes; a non-profit with offices in California would be eligible to apply as long as that non-profit is registered with the California Secretary of State.

2. Is a non-profit with offices in California but the headquarters in a different state an eligible applicant?

Answer: Yes; however, the non-profit organization must be registered with the California Secretary of State.

3. Is a technology demonstrator that is not based in United States eligible to participate in the Solicitation?

Answer: Yes; a technology demonstrator that is not based in the United States is eligible to participate as part of a project team.

4. Can a California registered non-profit without offices or staff in California be considered an eligible applicant?

Answer: Yes, as long as the non-profit organization is registered with the California Secretary of State.

Vehicle, Equipment, and Project Eligibility

5. Page 4, paragraph 2, cites a 2008 paper that battery-electric forklifts are commercially available up to 20,000-pound lift capacity. The paper did not provide any vendors or examples of these commercially available forklifts. Based on staff research and speaking with technology vendors, it currently appears that the upper limit of commercially available battery electric forklifts is 12,000 pounds. We would like to demonstrate a 15,000-pound battery-electric forklift, to show battery-electric

forklift technology is appropriate for the metal, lumber, and building materials industries. Would this forklift, combined with a Class 6 long-range fuel cell truck, qualify for consideration of this grant?

Answer: There are indeed commercially available battery-electric forklifts above 15,000-pound lift capacity, so that would not be an eligible project cost. As an example, Kalmar sells an 18,000-pound battery-electric forklift that they state has a lift capacity up to 20,000 pounds.

6. Can project funds be used to pay for light-duty vehicles that are included as part of a comprehensive project proposal utilizing multiple vehicle types?

Answer: Multi-Source Facility Demonstration Project funds cannot be used to pay for light-duty on-road vehicles but may be used to pay for pre-commercial zero- or near zero-emission light-duty off-road vehicles (rated at a minimum of 25 horsepower equivalent).

7. Can a project include costs for innovative software applications that improve the movement of vehicles and cargo containers within and around a freight hub, intermodal rail yard or port, thereby leading to reduced greenhouse gas (GHG) emissions? And can a third-party provider of such software applications participate as a project partner in a submission?

Answer: Yes; such software applications can be an eligible project expense if supporting project-funded vehicles or equipment, and the software provider would be eligible to participate as a project partner.

8. On Page 4 of the Solicitation, you give an example of taking an existing commercialized technology and applying it in a new capacity (using forklift lift capabilities in that instance). Can you confirm whether other types of updates to commercially available models would fit into this Solicitation? For example, would proposing to demonstrate an updated model of an existing commercialized product that, through this demonstration, would provide greater efficiency than is currently commercially available, be acceptable?

Answer: If the updated model is a pre-commercial, zero- or near zero-emission technology, then a proposed project could include it. Zero- and near zero-emission technology definitions are provided in the Solicitation in Section IX, Eligible Projects.

9. Could a project incorporate solar or battery energy storage? Could this count as a project cost or as match?

Answer: Yes; a project could incorporate solar or battery energy storage as infrastructure, as long as it supports project-funded vehicles or equipment. This could count as either project cost or as match.

10. Would trucks with ultra-low-NOx engines be eligible for funding? And would they have to operate on some blend of renewable natural gas?

Answer: If it is a commercially available engine (i.e., certified and available for sale), then it would not be eligible for funding. If it is a pre-commercial technology that meets the definition of “near zero-emission” stated in the Solicitation, then it would be eligible for funding. The Solicitation does not require any specific fuel type, but as stated in the scoring criteria, projects utilizing a higher percentage of renewable energy will score higher than those using a lower percentage or no renewable energy.

11. Are hydrogen fuel cell forklifts considered to be commercially available?

Answer: Hydrogen fuel cell forklifts are commercially available in the lower lift capacities (12,000 pounds and below).

12. Can we include the full cost of a fueling station that is sized to also support equipment and or vehicles that are not part of the project proposal?

Answer: Yes; but the fueling station must also be used to support project vehicle(s).

13. Is electrical infrastructure to recharge vehicles and equipment an eligible cost?

Answer: Yes; however, eligible costs would be limited to just the infrastructure that serves the project.

14. Can a vehicle be leased?

Answer: Leasing, similar to purchasing, is a characteristic of a commercially available product, which is not eligible for funding under this demonstration project. If leasing is a component of a project, the application must clearly explain the pre-commercial status of the technology and vehicle(s) or equipment.

15. If a separate non zero-emission project that was not publicly funded was already underway before this Solicitation, and as part of a Multi-Source Facility Demonstration Project application, the same project proposes to build upon the non-zero-emission project to make it zero-emission, would that be an eligible project type?

Answer: Yes; the project would be eligible for funding, assuming the project meets all other eligibility criteria.

16. What is ARB aiming to achieve in terms of demonstration numbers for each type of technology (i.e., the number 10 was mentioned in the Zero-Emission Drayage Truck

Demonstration Project Solicitation, but no specific numbers are mentioned in this Solicitation)?

Answer: There is no minimum requirement for the number of vehicles or equipment for this project – only that there be multiple vehicle/equipment types demonstrated that are utilizing zero- and/or near zero-emission technologies.

17. As this is a Multi-Source Solicitation, does ARB expect that a single proposal will include multiple types of equipment technologies, or just one type of technology to be demonstrated in a facility where numerous types of equipment will be used (with the notion that other equipment types will be able to piggyback off of advancements from the demonstration of the one targeted technology)? Would a diversity of proposed equipment types within one facility demonstration be considered an advantage?

Answer: Either multiple technologies used for multiple equipment types or a single technology used for multiple equipment types can be considered. Neither is necessarily better than the other; each project will be scored using the scoring criteria stated in the Solicitation.

18. If a hydrogen refueling station does not intend to sell hydrogen by the kilogram (kg), must it meet the Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices stated in the Hydrogen Dispensing subsection of Appendix C?

Answer: No; if the hydrogen refueling station will not be used to sell fuel by the kg, it is not required to meet the requirements in the Hydrogen Dispensing subsection of Appendix C.

Funding, Budget, and Match Contribution

19. Will equipment discounts from original equipment manufacturers (OEMs) count toward the CASH match requirement? If not, will it count toward the IN-KIND match? In either case, how are the prices, and thus discounts, verified given that these are development products that do not have list prices?

Answer: Equipment discounts from OEMs will not count toward the cash match or in-kind match requirements. However, if the OEM is absorbing some of the costs of the vehicles/equipment, that will reduce the overall cost of the project, which could make it more competitive. Absorbed costs can be itemized in the budget and count toward in-kind match requirements.

20. For the up to 10 points available under the "Budget, Match Funding, and Financial Capabilities" category, how much of those 10 points are tied to the amount of match funding put forward for a project? In other words, are a certain percentage of the

10 points directly allocated for match funding? What percent match threshold needs to be achieved in order to result in the highest possible score?

Answer: The 25 percent match (minimum of 10 percent cash and 15 percent in-kind) is a requirement; so technically, points are not awarded for achieving the requirement. However, higher match pledges will be scored higher, and there are additional factors listed in the scoring criteria that will also count toward the 10 point maximum score.

21. Can you clarify if Assembly Bill (AB) 118 or Greenhouse Gas Reduction Fund (GGRF) monies can be used as a match?

Answer: Neither AB 118 nor GGRF monies can be used to meet match funding requirements. However, they can be leveraged to bring down the overall project cost.

22. Although there is a prohibition on using funds from GGRF programs to meet the minimum 25 percent match requirement, can GGRF state funding from programs such as the California State Transportation Agency's Transit and Intercity Rail Capitol Program be utilized as match funding above and beyond the 25 percent match requirement in order to strengthen the project's overall level of funding?

Answer: No other GGRF monies can be used to meet any of the match requirements; but those funds can be leveraged to reduce the overall cost of the project, which could make the project more competitive.

23. How will ARB determine whether they will require data collection and emission testing "for baseline equipment/vehicles, where appropriate" (as stated on page 8 of the Solicitation)?

Answer: Baseline data collection is required for an existing vehicle or equipment at the facility that has the same or similar duty and drive cycles as the project-funded vehicle or equipment (e.g., if demonstrating a zero-emission heavy-lift forklift for which there is a diesel counterpart at the facility, then the diesel counterpart will be a baseline vehicle). As mentioned in response to question 24, if, after a grant agreement has been executed, ARB or the third-party data analysis provider determines that data collection is necessary for additional baseline vehicles (and remaining funds are available), the grant agreement may be amended to include additional data collection equipment. Costs for emission testing for baseline vehicles will be included in the third-party data analysis contract and not this Solicitation.

24. How shall a grantee determine when to include \$2,000 in the budget for each baseline vehicle or equipment (and for how many baseline vehicles or pieces of equipment total shall they do so)?

Answer: The submitted budget must include \$2,000 for data collection equipment for each baseline vehicle (as described in the response to question 23). Baseline data collection is not required for every diesel counterpart (e.g., if there are 10 diesel forklifts doing the same or similar work as the project-funded zero- or near zero-emission forklift, then only one of the diesel forklifts will be required to be a baseline vehicle and have data collection equipment installed). If, after a grant agreement has been executed, ARB or the third-party data analysis provider determines that data collection is necessary for additional baseline vehicles (and remaining funds are available), the grant agreement may be amended to include additional data collection equipment.

25. The Solicitation states that “ten percent of the total project cost must be in the form of cash committed by the Grantee and/or **technology demonstrator**” (page 5). Appendix A states “10 percent must be cash committed by the applicant or **industry partner**” (page A-8). Which one is correct?

Answer: Both are correct; the Grantee is also considered the applicant, and the industry partner can also be a technology demonstrator (or could be a third party).

26. Could a port use land contributed toward a project as part of a match?

Answer: No; as stated in the Solicitation in Section VI, Required Match Funding, project facilities, laboratories, or property will not be considered as part of a proposed match whether owned or leased by the Grantee or technology demonstrator.

27. Are match contributions (cost-share) accountable during the term of the demonstration project?

Answer: Yes; at the time of request for disbursement, match contributions must be made available for the associated completed milestone(s). The final report at the end of the project must document the total match funds contributed and expended.

28. Determining costs associated with post project commercialization (page 24 of the Solicitation), how should those costs be detailed in the application?

Answer: Each applicant will be responsible for determining and detailing in their application (Appendix A, Attachment 4) the estimated costs used in the cost-effectiveness calculations for each of the two scenarios, even though those costs are not funded through this project:

- during the actual proposed project over a 2-year demonstration; and
- once deployed into the marketplace, one year post proposed demonstration.

The methodology for determining cost-effectiveness is included Appendix D of the Solicitation.

29. Are fuel costs during the demonstration an eligible expense?

Answer: Yes; fuel costs during the demonstration are an eligible project expense.

Administrative Costs

30. Can administrative costs be part of an indirect contract for services, equipment, or other contracts?

Answer: Administrative costs can be used for day-to-day activities associated with administering projects (i.e., project labor, office supplies, and travel). Expenses related to equipment, such as maintenance, are equipment costs and are not considered administrative costs.

31. Can equipment costs be part of administrative costs?

Answer: As stated above, equipment costs are not considered administrative costs.

Disbursements

32. What is the process to invoice funds?

Answer: Costs are first incurred by the Grantee. The Grantee then submits a disbursement request. The Grantee may not submit a request for disbursement until the specific milestone(s) associated with those costs, as stated within the grant agreement, are completed.

33. Can timing of the disbursement request affect the timing of disbursements of funds?

Answer: Disbursements are usually made within 5 to 6 weeks of ARB's receipt of the disbursement request. However, if the disbursement request is received during the months of May or June, there is a possibility of delay due to the end of the fiscal year closeout.

Scoring

34. Can you describe the application scoring process and who will be on the application scoring team?

Answer: We will typically have 3 to 5 people on the scoring team, which will generally consist of ARB staff, but we have the option to reach out to other state agencies or state universities as well.

35. Will ARB staff score to one decimal place?

Answer: It is up to the scoring team as to whether they score to one decimal place.

36. How is the budget scored? Is it subjective or scored in comparison to other projects?

Answer: The budget, match funding, and financial capabilities are scored according to how well each of the relative criteria is addressed, and those that exceed the requirements are scored higher.

Emission Reductions

37. Going through the guidelines for the Multi-Source funding competition, I have noticed that some of the parameters required to perform the emissions reduction and cost-effectiveness calculations are missing for our technology (namely the energy density, carbon intensity, and energy efficiency ratio for liquid air). Could you advise us on how to address this? Would we be expected to supply our own analysis for these input parameters, or is there another way to align ourselves with the guidelines?

Answer: If you need to use variables for your project that are not included in the Solicitation's Appendix D, you may do so but must cite all sources and explain those variables, as explained in the scoring criteria on page 24 of the Solicitation.

38. So, applicants cannot include GHG emission reductions associated with infrastructure, and the emissions reductions cannot be assigned to the project?

Answer: Correct; as stated on page 13 of the Solicitation, emission reductions that are associated with any funded infrastructure are not allowed to be included as part of the emission reduction totals that will be considered during project scoring. Emission reductions will only be assigned to the advanced technology vehicles and equipment.

Vehicle Permitting and Certification

39. Will experimental vehicle permits be required on applicable vehicles?

Answer: All demonstration vehicles (including off-road equipment) that are not zero-emission as defined in the Solicitation must receive an ARB-issued Experimental Permit prior to operation. All zero-emission vehicles (including off-road equipment) will require an ARB approval letter prior to operation.

40. Does a vehicle or piece of equipment need to have started the formal ARB certification process to be eligible for funding as stated in the proposed Innovative Technology Regulation?

Answer: No.

General

41. What is the duration of the field demonstration phase?

Answer: We expect a minimum of one year of operation, but the application must include estimated cost-effectiveness over a 2-year demonstration (see page 24 of the Solicitation).

42. Do operators have to pay capital gains taxes on equipment funded by this demonstration?

Answer: Determining tax requirements or consequences are the responsibility of the selected Grantee(s) and project team participants.

43. What is the earliest that a demonstration project can start?

Answer: A selected project may begin as soon as a grant agreement between ARB and the Grantee has been fully executed.

44. Is there an email listserv for this Solicitation?

Answer: To distribute solicitation-related materials, staff uses the Air Quality Improvement Program (AQIP) listserv, which can be accessed via the AQIP website at <http://www.arb.ca.gov/aqip> or directly at http://www.arb.ca.gov/listserv/listserv_ind.php?listname=aqip. ARB also maintains a project-specific email list that staff uses to distribute information for work group meetings and the same solicitation-related materials that are sent to the AQIP listserv.

45. Are there any repositories or matching services to link technology providers with prospective applicants?

Answer: ARB does not maintain any repositories or matching services; however, other stakeholders are welcome to create and maintain such a service. The work group meetings ARB staff held in November and December last year for the development of this project also provided participants and prospective applicants an opportunity to meet and team build.

46. Can the sample grant agreement that's included in the Solicitation be modified?

Answer: The General Provisions cannot be modified from their current form.