Questions, Answers and Clarifications Used Medium-Duty Electric Vehicle Repower Demonstration PON-13-602

Alternative and Renewable Fuel and Vehicle Technology Program California Energy Commission July 22, 2013

Q1. The stated scope of the PON is medium-duty vehicles. Reference is made to the upper bound of the class-6 range of Gross Vehicle Weight Ratings, 26,000 lbs. In practical reality, however, original equipment manufacturers produce distinct chassis types for the medium-duty and heavy-duty markets. In the case of school buses, two medium-duty chassis in wide use are the International 3300 and the Freightliner FS-65. Depending on how they were built out, buses with these chassis generally end up with GVWRs between 25,000 and 27,000 lbs., with most coming in at the higher end of this range. Our hope is that you would interpret the scope of the PON as "medium-duty vehicles with GVWRs up to 26,000 lbs." Such an interpretation would facilitate the success of our project by allowing us to choose school district partners according to their qualifications and motivation rather than the precise value of their school bus GVWRs.

The weight limit is 26,000 lbs. - the upper limit of a Class 6 truck. If we were going to retrofit a Chassis that could have been built as a 23,000 to 28,000 lbs., would you consider a larger GVWR?

Could we use a larger chassis; 27,500 lbs and then rate the vehicle at 26,000 lbs?

Can the requirement for experience in the weight class be fulfilled if the experience is with vehicles built on chassis used for vehicles with GVWRs up to 26,000 lbs., but that they themselves may have exceeded this level?

The solicitation states "Medium-duty vehicles have a Gross Vehicle Weight Rating (GVWR) of 10,001 pounds to 26,000 pounds" in order to properly target the vehicles intended for retrofit under this solicitation. The GVWR is the rating of the vehicle prior to retrofit.

Q2. We are also wondering if the "before" vehicles must be registered and used in California or if they can come from out of state.

Do the vehicle(s) to be repowered have to come from a facility in California or can they be moved to California for this project?

The baseline vehicles must have been registered and operated in California prior to the demonstration.

Q3. Is there a timeframe for when the vehicles need to be physically on the road?

The duration of the on-road and laboratory testing phase of the demonstration should be at least 2 years.

Q4. How long does the project have to be? Is there any time limit?

There is no prescribed minimum or maximum length for the total project. However, the demonstration phase of the project must be at least 2 years and all work must be scheduled for completion by March 30, 2017 (Schedule of Products and Due Dates, page 12).

Q5. A plug-in hybrid electric vehicle repower could provide some electric drive with an engine for extended range. Would a plug-in hybrid electric vehicle with an internal combustion engine be considered for the repower demonstration or does the repower demonstration require 100% electric operation?

Could we provide a hybrid solution (i.e. electric + renewable based pneumatic for hilly drive) as a part of this demonstration?

The purpose of this solicitation is to fund demonstration projects that convert used medium-duty gasoline and diesel vehicles to all-electric drive. The demonstration projects will identify and address technical issues of zero-emission electric truck conversions (Purpose of Program Opportunity Notice, page 4). The project must demonstrate the range and reliability of zero-emission electric drive truck conversions (Eligible Projects, page 5). Since a plug-in hybrid electric vehicle is neither all-electric nor zero-emission, it cannot qualify under this solicitation.

Q6. I am with a public agency in California. We have a public-private partnership with a business in another State. Are we eligible applicants?

If the prime applicant meets the solicitation requirements and agrees to the terms and conditions, they are eligible. (See page 5, Eligibility Requirements.)

Q7. What is the definition of EV? All electric all the time? EV modes (hybrid propulsion systems)? Fuel cell?

Battery-electric and fuel cell vehicles are both zero-emission electric drive vehicles and would be zero-emission retrofits.

Q8. Can you please specify what the California Business requirement is to be eligible?

All information for registering and being in good standing with the California Secretary of State is on the website identified on page 5 of the solicitation, Eligible Applicants.

Q9. What is the minimum percentage of the work or percentage of funding that must be done in California?

There is no minimum percentage. However, all of the "demonstration phase" work must be conducted in California.

Q10. Is there a vehicle range requirement for the vehicle?

Is the ZEV requirement 51 miles?

There is no vehicle range requirement. The purpose of the demonstration is to demonstrate the range and reliability of a zero-emission retrofit.

Q11. Can there be more than one partner and match contributor for an application?

Yes.

Q12. Can we do multiple vehicles with more than one partner?

Yes.

Q13. Should we submit a single application for multiple vehicle projects or submit them individually?

If there is more than one partner and more than one vehicle, should we submit more than one application?

This is at the discretion of the applicant. One application may contain multiple partners and vehicles types/classes. Multiple applications may be submitted by the same applicant.

Q14. How would a warranty be applied to "used" parts on a vehicle?

The baseline vehicle "used" parts do not have to be warranted beyond any existing OEM warrantee already in place.

Q15. Can you please elaborate on what will be required for the warranty?

The repowered components must be warranted for a minimum of 5 years. The baseline vehicle must retain any existing OEM warranty or an equivalent replacement warranty. Vehicles are not required to have an existing OEM warranty to be eligible.

Q16. Is a component-level warranty sufficient, provided that any remaining full-vehicle warranty is left intact?

Yes.

Q17. Is there some additional full-vehicle warranty requirement? If so, can you please explain it and how it will impact scoring?

There is no additional full-vehicle warranty requirement.

Q18. Are buses within the weight class requirement eligible?

If they meet all eligibility requirements, yes.

Q19. For a project to be eligible, must the trucks be both retrofitted and operated in California or is operation in California sufficient as long as all other criteria are met, including a business presence in California?

Repowering and retrofit work may be conducted outside California. However, the vehicles must be operated and demonstrated within California.

Q20. Does the vehicle have to be retrofitted in California?

No.

Q21. Can multiple vehicles in different classes be retrofitted?

Yes.

Q22. How do you define market viability?

Market viability should be demonstrated and determined by Applicant. The evaluation for the market viability of a project will be based upon the scoring criteria in the application manual.

Q23. What is "confidential information"?

Section V. D. of the PON states:

No confidential information will be accepted either through the Application process or through the implementation of the funding award. Applications containing or proposing to deliver confidential information will be returned without consideration.

For the purpose of this PON, confidential information refers to any information that the applicant attempts to keep confidential (e.g. by marking it as confidential) or that is legally confidential (e.g. via statute, court order, or otherwise).

Q24. During the demonstration, should the vehicle be "loaded" or "unloaded"?

In order to properly assess durability and reliability data, both "unloaded" and "loaded" conditions should be evaluated during the project demonstration phase.

Q25. Would submitting a multi-vehicle application affect the scoring of that application?

Each application will be scored based upon the same scoring criteria.

Q26. Does the Energy Commission care about the type of technology used in the retrofit? Is there a specific type of technology the Energy Commission is looking for?

The specific technology employed to meet the requirements of the solicitation is at the discretion of the applicant.

Q27. One of the firms that we are considering working with has converted 40 foot transit coaches from diesel-powered buses to hybrid buses. They have also converted a 40 foot transit coach to a full electric bus. These vehicles have GVWRs that are greater than the GVWR of the vehicles that the CEC has targeted in PON-13-602. However, this firm has demonstrated its ability to design, engineer, integrate and field demonstrate hybrid and full electric vehicles of a heavier weight class.

Would the CEC consider this firm (as presented above) as a qualified partner? If not, can you expand on why they are not / would not be qualified for this PON?

The established manufacturer must provide evidence of business activity related to the production of repowered electric vehicles in the eligible vehicle weight class for a cumulative minimum of one year prior to their application to this solicitation (Eligible Projects, page 6).

Q28. Based on the presentation this morning and the solicitation, it looks like the maximum award is \$1,655,594/applicant. How much is available in the total funding pot?

Is there a range of possible additional funding?

Currently, the only amount available under this solicitation is \$1,655,594.

Q29. One of the members of our team is an entrepreneur who had experience in mediumduty electric drive systems at his previous company. He left that company and started a new company about a year ago. Given that he was/is in the leadership of both companies, does he fulfill the requirement for manufacturer experience?

The requirement is not based on individual experience but resides with the company or entity carrying out the repowering work. The established <u>manufacturer</u> must provide evidence of business activity <u>related to the production</u> of repowered electric vehicles in the above vehicle weight class for a <u>cumulative</u> minimum of one year prior to their application to this solicitation. Individual experience of team members is scored under criterion 1.

Q30. Can the Energy Commission confirm that the manufacturer that fulfills the experience requirement does NOT need to have a business presence in California? Is this right?

The primary applicant must have a California business presence.

Q31. On page 10 of the solicitation, it says resumes are limited to 2 pages each and do not count toward the project narrative page limit. Can the resumes be included in an appendix? If so, is there a preferred format or method for labeling the appendix?

There is no preferred format for resumes and they may be included in an appendix.

Q32. Can a fleet submit an application for multiple trucks of the same type/GVWR to repower?

Yes.

Q33. How many awards does the CEC expect to grant?

The number of awards is unknown at this time.