

E-109 Request for Proposals - Q&A

Updated 8/22/2013

Q1: "Do not include vehicle price or other acquisition costs in the response to the RFP." Are the vehicles being supplied? Are you expecting bidders to eat the cost of the vehicles? I am going to get these questions so can you please explain how we are supposed to recover the cost of the vehicles?

A1: Vehicles will be provided by the sponsor or their purchase will be funded in addition to the cost of the project as defined in the Statement of Work. In order to make an accurate comparison of the cost proposals, bidders should not attempt to quote a cost for an as-yet indeterminate vehicle fleet.

Q2: "...with regards to the provision of test fuel. We will need to have some idea of the types of blends that might be required so we can discuss with our gas supplier blending these fuels. Obviously the main ingredient will be Methane with some Butane, Propane and Ethane but what are the likely other components? Nitrogen, CO2, Sulfur? The more exotic the blend the higher the price is likely to be for what will certainly be a small order."

A2: The bidders are expected to procure the fuels. As the SOW noted, the precise formulation of the test fuels is not yet known, but will be determined from ongoing research. However, it suggests that "Fuel properties, such as the concentration of inerts, methane, and heavier hydrocarbons, should be kept within a range considered reasonable for market fuels." Please estimate the costs based on this general guidance.

Q3: We understand the cost of procuring the test vehicles is not to be included in the proposal quote. However, it was not stated how the test vehicles would be provided. <Bidder> already possesses one of the EU test vehicles recommended. Does our possessing some of these vehicles add value for working with us, or does CRC have to provide these vehicles because additional testing follows for these vehicles.

A3: Having the vehicles already available clearly adds value and should be noted in the proposal, even if not included in the cost.

Q4: Will the vehicles come already prepped with exhaust taps and thermocouple taps, or do we need to include extra time, effort, and materials for instrumenting and preparing these cars prior to test?

A4: Bidders should include costs for preparing vehicles for testing, as well as returning them to a condition to prepare them for sale.

Q5: Six different gas blends are called out presently. Shall the proposal include our cost for having the test gas bottles custom blended, analyzed and delivered from our vendor?

A5: Yes.

Q6: <Bidder> has established expertise in testing CNG-fuelled vehicles and the analytical comparisons between such systems. We have more questions we wish to discuss to clarify the proposal as regards stated test sequence, prioritization of data collected, and the requested instrumentation. Perhaps a brief three-way with you next week is possible to go over these points that we need to understand the rationale for the request. Please suggest a convenient time for us to talk.

A6: In order to provide information at the same time to all participating bidders, all technical questions must be submitted in writing.

Q7: The proposal indicates that "Replicate testing should be randomized." How does CRC propose things be randomized. Will the order the fuels be tested in be randomized, but the duplicate measurements be made back to back once the vehicle the vehicle is one a particular fuel. Or will each fuel be tested once

on each fuel in a randomized order, and then each fuel will be tested a second time in a randomized order, such that there will essentially be a fuel change between every test (or most every test).

A7: The latter.

Q8: Will an regular LA4 or bag 1/bag 2 of the UC cycle be considered sufficient preconditioning between tests on different fuels.

A8: Yes; that's OK. A standard overnight soak after the precon will be needed also. (Although it could be argued that this is unnecessary for the dedicated NGVs. Bi-fuel vehicles would definitely need it, however.) By the way, it is probably not necessary to change the gasoline between tests with the bi-fuel vehicles. If the gasoline is used at all, it would only be for the cold start.

Q9: In terms of vehicle selection, will CRC be mostly looking for newer model years, say 2011+? Or is there a rough anticipate age for the vehicles?

A9: Not sure how this question is pertinent. Vehicles will generally be 2011+.

Q10: Is there a desire to do any statistical analysis at the level of say a SAS based ANOVA, or would this depend on how many vehicles are included in the final test matrix.

A10: Given the limited project scope, it's not clear if this level of analysis is warranted, however bidders are welcome to mention the availability of such analyses.

Q11: Will the six test fuels be identified and provided by CRC or identified and purchased by the test laboratory? Should fuel analysis costs be included in the RFP response and if so, has CRC identified a list of requested tests or key properties for analysis?

A11: See Q2&A2 for general guidance. Bidders are encouraged to suggest fuel analyses based on their experience & ability.

Q12: Does CRC intend to supply the natural gas blends to be tested for the program? If so, in what form (i.e. bottles, etc.) would the fuel be supplied? If CRC does not plan to provide the fuel would you be able to provide the fuel specifications for the six different blends?

A12: See Q2&A2 for general guidance.

G13: SOW indicates that vehicle price & other acquisition costs should not be included in response, and gives examples of vehicles. Would it be correct to assume that CRC would be responsible for selecting and procuring test vehicles. Will supplier have any involvement in this process?

A13: (Similar to Q1&A1) It is highly likely that the selected contractor will be asked to procure the vehicles, which would add scope and cost to the project / contract. However to avoid adding uncertainty to the cost proposal comparison (as the specific vehicles have not been selected yet) we've asked that they not be included as part of the proposal for this competitive solicitation.

Q14: Will the test vehicles be new (green) and require 4K conditioning before testing? Should the response include this, or should we assume that the vehicles will be supplied aged?

A14: This is not yet known. Bidders should describe and quote the option to condition new (green) vehicles if required.

Q15: Will vehicles be available concurrently or supplied in a progressive manner?

A16: See A13 for general guidance.

Q17: Required accuracy of crank time measurement?

A17: Bidders are encourage to propose an appropriate measurement accuracy based on their experience and ability.

Q18: Required method of engine knock measurement - combustion analysis with in cylinder pressure measurement via spark plug transducer or audible?

Q18: Bidders are encourage to propose an appropriate measurement method based on their experience and ability.

Q19: SOW requests that Engine Torque be measured. Will all vehicles support the requisite J1979 Mode 1 PIDs (62,63 & 8E) and/or their EURO VI equivalents when operating in Gaseous mode, or should this be measured using external equipment.

A19: Bidders are encourage to propose an appropriate measurement method based on their experience and ability, with the assumption that when data are available from the ECU, that method would be employed rather than invasive direct measurements.