

Questions and Answers
9/12/2012

REQUEST FOR PROPOSAL (RFP) 212858 – Demonstration of Fuel Cell-Based Auxiliary Power Unit for Refrigerated Trucks

Question 1:

Are there any restrictions on the fuel cell APU solicitation that would prevent companies from outside of the USA submitting a proposal?

Answer:

Please see the below excerpt taken from page 4 of the Solicitation's Attachment 4: Requirements Document For Demonstration of Fuel Cell-Based Auxiliary Power Unit for Refrigerated Trucks August 2012, REV. 3:

“This project is open to nonprofit and for-profit entities, institutions of higher education, and state and local governments; however industry participation is required to assure there is a potential for commercial market entry. Federally Funded Research and Development Centers, including U.S. national laboratories, are not eligible for this project. This award is available to U.S. based original equipment manufacturers (OEM). **Foreign entities, if participating as a supplier or subcontractor, are required to conduct work through their U.S. subsidiary and the units must be demonstrated in the U.S.** A minimum cost sharing of 50% of non-federal funds for demonstration and market transformation will be required for all awards issued under this project. Cost share applies to all allowable costs associated with the project including, but not limited to, capital, installation, operating, maintenance, and decommissioning costs. All systems must be installed in the U.S. and its territories. State and other fuel cell subsidies and tax incentives cannot be used for the cost share”.

Question 2:

I am writing to inquire about the technical requirements of the fuel cell-based APU for refrigerated trucks RFP. After reading through the documents, it seems that this project is open to all fuel cell types, so long as it meets the performance metrics. Is this correct?

Answer:

Yes, all fuel cell types are acceptable.

Question 3:

Is there is any preference for Fuel Cell APU technology, e.g. PEM or SOFC?

Answer:

No, all fuel cell types are acceptable.

Question 4:

- A. The requirement that "on-board reformation to produce hydrogen fuel from transportation fuels or other means of fuel production on board the vehicle is not allowable" suggests that either 1. Reformation of transportation fuels (e.g. Diesel) to a fuel other than pure hydrogen is acceptable or 2. The use of fuels other than hydrogen is effectively not allowable. Would you please clarify?
- B. As I read the requirements, "On-board reformation to produce hydrogen fuel from transportation fuels or other means of fuel production on board the vehicle is not allowable." (pg. 5. Requirements Doc, Rev3) and therefore, the allowable fuel is hydrogen. In other words, reforming of existing transportation fuel is not allowed, are you are only looking for a hydrogen fuel cell.
- C. In regards to section 2.1 technical requirements: Bullet #3, On board reformation to produce hydrogen fuel from transportation fuels or other means of fuel production on board the vehicle is not allowed. Is it acceptable to allow reformers that are integral to the fuel cell to enable the use of road diesel, or is this equipment specific to run only on hydrogen or methanol?

Answer:

The fuel cell is to operate with either hydrogen or methanol as its fuel. Hydrogen is the fuel of choice but direct methanol fuel cells are also acceptable. One of the purposes of this solicitation is to build out the hydrogen infrastructure for fuel cell vehicles.

Question 5:

The solicitation states that "This project aims to increase the number of commercially available fuel cell-powered systems", which implies that "Battelle contemplates awarding a Firm Fixed Price Contract for this request". However, there are no commercially available fuel –cell

powered systems yet as they are still under development. Therefore, a contract should be different than a “Firm Fixed Price”. Would you please verify?

Answer:

Although this solicitation requires teaming with a fuel cell manufacture to demonstrate a fuel cell-based APU for a TRU on a short-haul truck used in regular commerce, fuel cells themselves are commercially available. Therefore the issuance of a Firm Fixed Price contract is anticipated.

Question 6:

In regards to section 2.1.4 technical requirements: Bullet #13 Filling station type (compressed hydrogen, liquid hydrogen, methanol, etc.) Our understanding is all methanol fuel cells require a reformer.

Answer:

Direct methanol fuel cells do not require a separate reformer and are an acceptable alternative to hydrogen. Diesel and other fuels, even if their reforming is integral to the fuel cell are not acceptable.

Question 7:

Does APU just provide truck cab sleeper compartment climate control and electric power (shore power) only?

Answer:

The APU is to provide power to the refrigerated or freezer unit of the short haul, medium duty truck. It could also provide power for climate control or other truck ancillaries, but this is not required.