

REQUEST FOR INFORMATION (RFI) #:0000428134**Battery Trailer for Zero-Emissions Vehicles****Reply Date: 04/06/2023**

This Request for Information is not a solicitation of actual bids, which may be solicited by means of a Request for Proposal (RFP) at a later date. The purpose of this RFI is to identify the most appropriate option (if any) to meet the current power needs of an electrified fleet of public transit and support vehicles.

NYCT/MTABC is open to both newly developed and commercial off-the-shelf (COTS) systems. Proposers with battery trailer systems which have been successfully implemented in other transit/transportation properties are encouraged to respond. As part of the RFI, NYCT/MTAB intends to evaluate a solution that meets the following system considerations.

Background Information

NYCT/MTABC provides bus service in all five boroughs of the City of New York and has a fleet of approximately 6,000 buses operating out of 28 bus facilities (depots) throughout the City. NYCT/MTABC operates 234 local, 71 express, and 20 Select Bus routes in the five boroughs. Buses run 24 hours a day, seven days a week: buses travel approximately 120 million miles annually.

New York City Transit / MTA Bus (NYCT/MTAB), agencies of the Metropolitan Transportation Authority (MTA) are seeking to identify potential sources that may be interested in developing, delivering, and maintaining Mobile Battery Systems to meet the following operating needs:

- Primarily serves as part of a depot-based micro-grid, allowing for peak load shaving, demand smoothing, solar generation storage, backup power, and grid demand response.
- Capable of providing emergency power support at depot facilities during power outages.
- In emergency situations, the unit can be deployed to provide backup power at other facilities facing power outages.
- Supports the remote charging of buses in incident response situations.

At a minimum, the proposer shall demonstrate a system that will be able to meet the following functional and operational criteria:

- The system must be able to support the anticipated operating needs as described. It is anticipated that systems will provide anywhere between 1-4 mWh of energy storage.
- The system must be mobile – either as a trailer that is towed, or as a vehicle that is driven.
- The system must have a battery management system (BMS) with an early warning system for emergency preparedness.
- The system must meet all federal, state, and local requirements for vehicle safety, height, and weight.
- The system must be compatible with MTA's existing power supply and charging infrastructure.



- The system shall provide flexibility in the interface and rate of both recharging and discharging.
- The system shall include a battery management system that allows for remote monitoring.
- The system shall provide wi-fi and wireless connectivity.
- The system shall provide a means of interconnection with standard battery-electric vehicles and with depot facility power systems.
- The system must be compatible with commercially available Charge Management Software (CMS).
- The system shall notify users of any charging faults.
- The system shall comply with MTA cybersecurity requirements (if applicable).

Specific Instructions

When preparing your submission, please review and address in writing your approach to the above requirements. Include a description of your company, a brief overview of your system, and a list of properties (if any) with contact information that are presently utilizing the system being offered, and answer the following questions:

- What is the approach used to architect a system that includes all the services/specifications listed?
- Describe your company's deployment procedures.
- Describe your company's reactive management processes, including troubleshooting, communication, triage, etc.
- Describe your company's practices for maintaining and refreshing software
- Describe your company's approach when interacting with customers.
- Describe your company's approach when interacting with third party suppliers (carriers, hardware, maintenance, and support vendors).
- How many installations do you have in operation today? Does this include any transit/transportation properties?
- What feature(s) and/or functionality differentiate your product from your competitors?
- In addition, please provide recommendations on the latest technology which exceed the minimum requirements listed in the RFI.
- In prior deployments, what is the failure rate? What are the maintenance requirements needed?
- Describe the types of batteries used and the Battery Management System (BMS) used, including source materials and final product (including place of origin, place of assembly, composition, etc.).
- Describe the range of metrics that MTA would be able measure while in operation.

Indicate a rough estimate for the providing this product. Please include what the estimate is based on and what is not part of the overall estimate.



New York City Transit
Department of Buses

Submissions

Submissions should be sent to the address below no later than **04/06/2023**.

New York City Transit
2 Broadway, Floor #, Office #19.141
New York, NY 10004
Attn: Shadé James, MPA
Tel (646) 252-6276

If you would like to make your submission electronically, please send it to Shade.James@nyct.com.