



## **REQUEST FOR INFORMATION**

**CHARGING SYSTEMS  
FOR  
BATTERY ELECTRIC COMMUTER COACHES**

**August 15, 2018**

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## **1. BACKGROUND INFORMATION**

The State Road & Tollway Authority (SRTA) is a state-level, independent Authority created by the Georgia General Assembly to focus on connecting people, jobs, and communities through preferred mobility solutions and innovative financing. In July 2017, SRTA consolidated with the Georgia Regional Transit Authority (GRTA) and now operates the Xpress commuter bus and regional vanpool services. Currently, Xpress operates 27 bus routes out of 27 park-and-ride facilities within the metropolitan Atlanta region. Xpress connects commuters from over 44 counties with major employment centers in Atlanta's business districts. In 2017, Xpress carried approximately 2 million passengers over 50 million miles, removing approximately 1.5 million vehicles from the road. This reduction helps lower harmful emissions, while saving Georgia residents approximately \$125 million in annual congestion costs. Although the Xpress service only operates in 12 counties, it draws ridership from over 44 of Georgia's 159 counties, allowing for enhanced regional mobility. Overall, the Xpress service connects over 3.4 million residents to 375,000 jobs across the region. The current Xpress fleet comprises about 165 over-the-road coaches, 90 of which operate out of the South Operational Facility (South Ops). All of the existing coaches are 45 feet long and are diesel fueled.

## **2. RFI OBJECTIVES**

SRTA has initiated a program to replace 20 existing coaches that have reached the end of their useful life with 20 battery electric coaches. All 20 electric coaches will operate out of South Ops. Furthermore, all charging will occur outdoors at South Ops. SRTA will be conducting a competitive procurement process to source the new battery electric coaches and associated charging systems. This RFI is intended for charging system manufacturers and vendors that offer heavy-duty, high-powered (100+ kW) charging equipment for battery electric transit vehicles.

The objective of this RFI is to educate SRTA staff on the current state of battery electric commuter coach charging systems and related charging infrastructure for commuter service application. This RFI solicits information from respondents with the expectation that SRTA will gather sufficient market information to help inform the development of specifications for a Request for Proposals.

## **3. RESPONDENT INSTRUCTIONS**

### **3.1. Definitions**

The following definitions shall apply when used throughout this Request for Information (RFI):

- (a) Charge Connector (also known as a charge coupler or charge head) – the device that establishes an electrical connection between an electric

vehicle and EVSE. On plug-in EVSE, the charge connector is the device at the end of the charge cord.

- (b) Charging System – see EVSE
- (c) EVSE (Electric Vehicle Supply Equipment) – the power converters, conditioning equipment, and conductors used to connect an electric vehicle to the local utility grid and deliver energy to the vehicle.
- (d) Response – a written document prepared by a charging system manufacturer that addresses the requests and inquiries of the RFI.
- (e) Respondent – the submitter of a response to the RFI.

### **3.2. Deadline for Response**

Responses must be delivered to SRTA before 2:00 PM EST on Friday, September 21, 2018.

### **3.3. Response Format and Delivery Location**

One (1) electronic copy in Portable Document Format (PDF) on USB and one (1) original paper hardcopy must be delivered to Gary Thomason at the following address:

State Road and Tollway Authority  
c/o Gary Thomason, Procurement Specialist  
245 Peachtree Center Avenue NE  
Suite 2200  
Atlanta, GA 30303

Respondents shall include “RFI No.19-040: Charging Systems for Battery Electric Commuter Coaches – To be opened by addressee only” on the exterior of the sealed envelope containing the Respondent’s submission.

### **3.4. Question and Answer Period**

Please contact [Gary Thomason, Procurement Specialist](mailto:gthomason@srta.ga.gov) at [gthomason@srta.ga.gov](mailto:gthomason@srta.ga.gov) with any questions regarding this RFI.

All questions must be submitted in writing via email no later than 5:00PM EST on Wednesday, August 29, 2018. Answers will be posted no later than Friday, September 7, 2018 at <http://www.srta.ga.gov/doing-business-with-us/>.

### **3.5. Restrictions on Communications with SRTA during RFI Period**

From the date of issuance of this solicitation through the date of contract award by SRTA, all official communications to and from SRTA regarding this RFI will be transmitted in writing (defined as being sent or received via letter or email on official firm/agency letterhead or by electronic mail).

All Respondent communications concerning this RFI should be directed to the SRTA Procurement Specialist. Any oral communications will be considered unofficial and non-binding on SRTA. Respondents should only rely on written statements issued by the SRTA Procurement Specialist.

All Respondents and representatives or partners of any Respondent are strictly prohibited from contacting any other SRTA staff or Board member or third-party representatives of SRTA on any matter related to the RFI.

### **3.6. Confidentiality**

SRTA recognizes that a Respondent may wish to include information in its response to this RFI that the Respondent may consider proprietary, confidential, or a trade secret. Any and all materials submitted in response to this RFI are subject to public inspection, pursuant to the provisions of Georgia's Open Records Act upon completion of the RFI process. SRTA's receipt, review, evaluation or any other act or omission concerning any such information shall not be considered to create an acceptance of any obligation or duty for SRTA to prevent the disclosure of any such information except as required by the Open Records Act. Respondents that decide to submit information they believe should be exempt from disclosure under the Open Records Act shall: (i) clearly mark each page containing such information as confidential, proprietary or exempt, (ii) shall include such information in a different color from the rest of the proposal text, (iii) shall state the legal basis for the exemption with supporting citations to the Georgia Code, and (iv) for records containing trade secrets, Proposers who wish to keep such record confidential shall also submit and attach to the records an affidavit affirmatively declaring that specific information in the records constitute trade secrets pursuant to Article 27 of Chapter 1 of Title 10 of the Georgia Code.

Pursuant to Georgia Law, if the information is requested under the Open Records Act, SRTA shall make a final determination if any exemption actually exists for SRTA to deny the request and prevent disclosure. SRTA will withhold such information from public disclosure under the Open Records Act only if SRTA determines, in its sole discretions, that there is a legal basis.

### **3.7. Reserved Rights**

Issuance of this RFI does not commit SRTA to issue an RFP or award a contract. SRTA reserves the right to cancel this RFI.

## **4. REQUESTED INFORMATION**

The following information is requested from interested EVSE manufacturers and vendors that offer heavy-duty, high-powered (100+ kW) charging equipment for battery electric transit vehicles. Additional relevant information, such as product brochures, test results, real-world deployment data, and end-user references can be attached to your response.

### **4.1. Contact Information**

**4.1.1.** Provide the following business information:

- Company name
- Company street address
- Company web address

**4.1.2.** Provide the following contact information:

- Point of contact name
- Point of contact title
- Point of contact email address
- Point of contact phone number

### **4.2. Business Structure**

**4.2.1.** When was your company founded?

**4.2.2.** Is your company publicly- or privately-held? List major shareholders.

**4.2.3.** Describe your business structure. List any parent companies or subsidiaries.

**4.2.4.** What is the total number of persons employed by your company? How many of those persons are employed in the United States?

### **4.3. Facility Information**

**4.3.1.** Provide the following information for each of your facilities:

- Physical address
- Activities performed (e.g. headquarters, administration, sales, design, manufacturing, parts warehouse, field support)
- Number of employees

### **4.4. Product Information**

**4.4.1.** Provide the following information for each charging system you offer:

- Model name and/or number
- Nominal charge rate (measured in kW)
- Electrical Input Requirements
  - voltage (e.g. 480 V AC, 3-phase)
  - frequency
  - maximum current
- Electrical Output
  - voltage range (e.g. 400 – 800 V DC)
  - maximum current
  - maximum power
- Nominal power factor
- Nominal efficiency
- Type of charge connector (e.g. CHAdeMO, CCS Type 1, CSS Type 2, etc.)
- Number of charge connectors
- If a charger is equipped with multiple connectors, what is the maximum power that can be provided by a single connector? Describe how power is allocated between the connectors when they are plugged into:
  - the same bus
  - multiple buses

In each scenario, can each connector provide power simultaneously? If so, how much power?
- Length of charge cord (list all possible options if cord is available in different lengths)
- Weight of charge cord (lbs. per foot)
- Is there a liquid-cooled charge cord option? If so, what are the benefits and drawbacks of the liquid-cooled cable option?
- Dimensions of each piece of equipment that comprises your charging system and a layout or schematic that shows the relationship between the different components. Describe clearances for servicing and ventilation, etc.
- Environmental rating of enclosures (IP rating)
- Status of UL or other electrical code and safety certification

- Preventative maintenance requirements
- List price of common replacement parts, the process to order parts, and the typical order fulfillment time. Common replacement parts may include but are not limited to fuses, air filters and other consumables, damaged cables, and damaged connectors.
- When is the charging system available to order?
- Approximate lead time (time between order and delivery)
- List price of charger (order size: 1)
- List price of charger (order size: 20)
- Is the charging system compliant with the Federal Transit Administration's (FTA) "Buy America" requirement for manufactured products? If it is not currently compliant but is expected to be in the future, please provide the year you expect to deliver compliant units.

**4.4.2.** Describe any charge management features that may allow SRTA to:

- Reduce the charging load on the local utility grid
- Automatically limit charging to off-peak hours
- Ensure buses reach a specified SOC by a specified time

Explain if the features can be controlled and monitored at a central terminal, such as a computer at a dispatch center. List any hardware, software, or network requirements for each feature.

**4.4.3.** Describe any access you provide to historical or real-time charging data. This may include a status dashboard, database, reports, and/or automatic notification capabilities. Please include:

- a list of logged variables (e.g. energy drawn from the grid, energy delivered to each vehicle, charge rate throughout charging, etc.)
- types of reports (e.g. real-time status, real-time alerts, nightly exception reports, recurring reports etc.)
- methods of accessing data, alerts and reports (e.g. proprietary application, internet browser, SMS, email, etc.)

**4.4.4.** List all battery electric buses (bus make and model) on which your product(s) have been tested and certified for use. Please indicate the charging system (model name/number) tested and date of certification.

**4.4.5.** Are all of your charging systems compliant with the open charge point protocol (OCPP)? Can third party software providers integrate with your hardware?

- 4.4.6. Describe your strategy for scalability, i.e., your ability to support the agency as they increase the number of buses that charge at their depot.
- 4.4.7. Please provide standard warranty information as well as options for extended warranties.
- 4.4.8. Does your company provide any services related to site planning, design, permitting, construction, installation and commissioning of your charging system?
- 4.4.9. Please describe your support procedure and support network in the event of equipment failure.
- 4.4.10. Provide a detailed and specific discussion of strategies to ensure maximum charger uptime and any uptime guarantees. Topics to discuss include available service plans, common repair parts, remote monitoring and diagnostics, redundancy, backup power supplies, etc.
- 4.4.11. Describe any available training for systems users, operators, and maintenance personnel. List any certifications, training or licenses that existing personnel would require to perform in-house maintenance of charging equipment.
- 4.4.12. Are there any on-going costs or fees related to the purchase of your charging systems, i.e., charge management, data collection, on-line data portal, reporting, etc.? If so, what are the costs for these services?
- 4.4.13. Please list any features or capabilities of your charging equipment that are not listed within the features or capabilities detailed above that would be relevant, including what makes your product stand out among competing technologies. Please prioritize the list.

#### **4.5. Sales and Deployment Experience**

- 4.5.1. Provide the following information for each of your past and present customers:
  - Customer Name (e.g. transit agency name, company name, etc.)  
Can list 'prefer not to disclose' if appropriate, however, named references are preferred.
  - Model number/name of charger purchased
  - Number of chargers purchased
  - Year of sale
  - Customer Application (e.g. transit, freight, light-duty, etc.)
  - Status (e.g. on order, in production, delivered, installed, in use)

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