

Washington Metropolitan Area Transit Authority RFI FOR INVERTER SYSTEM OR REVERSIBLE DC
SUBSTATION SYSTEM

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Calvert, Norie A.

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RFI Guidelines

Please note that this is for INFORMATIONAL and PLANNING purposes only and does not constitute a Request for Proposal (RFP). Responses to this RFI will not be accepted by WMATA to form a binding contract. WMATA will not pay for the information solicited nor recognize any costs associated with the submission of the RFI. The purpose of this RFI is to provide an opportunity for industry to enhance the success of any future procurement to meet this requirement. Any information obtained as a result of this RFI is intended to be used by the Government on a non-attribution basis for program planning and acquisition strategy development.

Please be brief in your answers. If a particular answer; however, is best presented as an attachment you may do so.

WMATA's evaluation and possible selection of companies for further discussions is a business decision and will be based upon a composite of a company's response to the factors set forth under "Information Requested" below. In submitting a response to this RFI, companies agree that the WMATA will not provide its rationale for the selection or non-selection of a prospective business partner(s) for possible further discussions with the WMATA. However, all companies will receive an acknowledgement as to their selection for, or removal from, further consideration. Furthermore, in submitting a response to this RFI, companies agree that any selection or rejection of a business partner(s) by WMATA is final and indisputable.

Confidential Information

The information contained in this Request for Information (RFI) is confidential and proprietary to The Washington Metropolitan Area Transit Authority (WMATA). In accepting this RFI, vendors agree to the following conditions, under USA law:

1. Each party recognizes and agrees that the Confidential Information has been compiled, created and maintained by special effort and expense of the other party.
2. Each party recognizes and agrees that disclosing or disseminating Confidential Information to a third party will have a materially adverse effect on the other party and agrees not to disclose or disseminate the Confidential Information to any third party. Except as necessary to perform its obligations hereunder, each party shall not use, reproduce or draw upon the Confidential Information or circulate it within its own organization.
3. Each party shall provide notice to the other party of any demand made upon it under lawful process to disclose or provide the other party's Confidential Information. Such

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party agrees to co-operate with the other party if it elects to seek reasonable protective arrangements or oppose such disclosure, at the expense of the party that is seeking the protective arrangements or opposing the disclosure.

4. Any Confidential Information disclosed pursuant to such lawful process shall continue to be Confidential Information, the access to such Confidential Information shall be limited to those persons (i) only with a need to review such information for the purposes for which the disclosure was required, and (ii) who agree in writing to keep the Confidential Information confidential.

Project Introduction

WMATA's metrorail system operates on 750 VDC (nominal) power. WMATA uses dynamic, or regenerative, braking on railcars to reduce energy consumption and optimize traction power system performance. However, the current metrorail system is not able to fully capture all of this available braking energy and the excess energy is dissipated as heat through onboard resistors. Technologies that allow for the productive use of this excess energy that would be wasted are being successfully installed and operated at other transit authorities.

WMATA is looking for a 2 MW inverter system or Reversible DC Substation system which can be installed at an existing traction power substation (TPSS) to recover the excess energy from the railcars and return excess braking energy to Metro's internal AC 34.5KV grid.

This system can be a combination of (2) 1-MW, or (1) 2-MW inverters with associated protective devices to be housed inside the TPSS substation. Energy source shall be from WMATA 750 VDC (nominal) rails and the output of the inverters shall be connected to WMATA internal 34.5KV AC power grid.

The provider of the inverter must be able to certify compliance with 49 U.S.C. 5323(j) and 49 C.F.R. Part 661, which provide that Federal funds may not be obligated unless steel, iron, and manufactured products used in FTA-funded projects are produced in the United States, unless a waiver has been granted by FTA or the product is subject to a general waiver. General waivers are listed in 49 C.F.R. 661.7

This solution proposed may be used to develop a future RFP for an inverter system or a reversible DC Substation system.

Requirements

The system can be installed indoor. Propose a technology of the inverter units/system which will comply minimum of the following requirements:

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1. 2MW inverter\Energy Recovery system,
2. Top entry feeds,
3. Integral HMI panel,
4. Input voltage 750 VDC nominal,
5. Current distortion, TDD of less than 5%,
6. Efficiency of 96% or higher,
7. Max operating temp 40 degrees C,
8. Satisfy local power utility companies' requirements,
9. Technology could be IGBT or Thyristor technology.
10. The technology must be installed and in service at a heavy rail transit system for over 3 years with successful results,
11. DNP3 or IEC 61850 communication interface for remote monitoring/control,
12. Noise level less than 75db
13. Fit within a floor space area of 13 ft x 13 ft (applies to two 1-MW inverters or one 2-MW inverter)

The provider of the inverter must be able to certify compliance with 49 U.S.C. 5323(j) and 49 C.F.R. Part 661, which provide that Federal funds may not be obligated unless steel, iron, and manufactured products used in FTA-funded projects are produced in the United States, unless a waiver has been granted by FTA or the product is subject to a general waiver. General waivers are listed in 49 C.F.R. 661.7

Instructions to Vendors

This is a Request for Information (RFI), not an order. No cost can be charged to WMATA for any reason. This document shall not be construed as a request or authorization to perform work at WMATA's expense. Any work performed by a vendor will be at the vendor's own discretion and expense. This RFI does not represent a commitment to purchase or lease. Submission of a response constitutes an acknowledgement that the vendor has read and agrees to be bound by such terms.

WMATA intends to submit a formal Request for Proposal (RFP) for the services described in this document prior to the end of 2017. There is no guarantee that WMATA will submit an RFP, if an RFP is submitted, that it will occur in the time frame described in this RFI. A RFP will be sent to vendors that demonstrate adequate capabilities in response to this RFI.

This is not a request for offers but only a request for information. A determination not to issue a solicitation based upon responses to this notice is solely within the discretion of the Washington Metropolitan Area Transit Authority (WMATA).

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Point of Contact

All communication with WMATA must be directed to the single Point of Contact for this project, as follows:

Norie Calvert, Office of Procurement & Materials
(202) 962-1678
nacalvert@wmata.com

Submission of Responses

Metro is issuing this Request for Information to obtain recommendations from Vendors or Contractors who are required to submit an electronic submission in response to this RFI.

At this time no price information needs to be provided in response to this Request for Information. However, Vendors or Contractors must submit details of their proposed Inverter System or Reversible DC Substation system. Provide details that the proposed system will comply with each of the thirteen (13) minimum requirements listed above. For Vendors and Contractors information, WMATA is planning to install an Inverter or Reversible DC Substation system at an existing Potomac Yard Traction Power Substation. Upon successful implementation, WMATA has multiple TPSSs where common AC power grid links are available, those TPSS can be upgraded with this technology for the productive use of the excess energy.

The information received in response to this Request for Information will be used by Metro to determine the next action steps to move forward. A response will not result in an award. Also, WMATA does not commit to any incurred cost in preparation of a response to this Request for Information.

This RFI remains the property of WMATA at all times, and must be returned by the vendor upon request. Vendors not submitting a response must immediately return all printed, graphic and electronic documentation to the point of contact.

All responses, once delivered, become the property of WMATA.

If you have questions, please e-mail them to nacalvert@wmata.com no later than close of business (5:00 pm), **Wednesday, June 21, 2017**.

Responses are due by 3:00 pm on Friday June 23, 2017.