

Request for Battery Energy Storage Proposals



Virginia Municipal Electric Association

RFP Issued: December 5, 2018

Proposal Deadline: February 1, 2019

GDS Associates, Inc.

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1 Scope

Virginia Municipal Electric Association (“VMEA”) seeks competitive proposals for the complete engineering, procurement, and construction of varying sizes, 2 - 12 MW, with 1- or 2-hour durations of standalone utility-scale battery energy storage system(s) (“BESS”) in accordance with VMEA’s requirements as defined in this RFP. VMEA will own and operate the resources after commissioning (i.e. after the commercial operation date).

This BESS project will be located ‘behind-the-meter’ at a VMEA member’s utility substation, more specifically described in Section 4. The primary function of the BESS will be the reduction of VMEA’s transmission demand (annual coincident peak with Dominion Transmission Zone) and VMEA’s monthly billing demand (monthly coincident peak with the Dominion LSE). That is, VMEA intends to operate the BESS to reduce its share of coincident peaks, which are drivers of certain wholesale power costs for VMEA. VMEA anticipates that it will have full operational, but remote, control of the dispatch of the BESS system as VMEA has experience with the forecasting and timing of these potential coincident peaks.

This RFP describes the basis for VMEA’s request and provides information and instructions for Respondents. Proposals are due **February 1, 2019**.

2 RFP Communications

All questions or other communications regarding this RFP should be directed through VMEA’s consultant.

GDS Associates, Inc.	
1850 Parkway Place, Suite 800 Marietta, GA 30067	
Attention:	Mr. Ryan Johnson, PE Senior Project Manager
Direct:	770-799-2351
Email:	Ryan.johnson@gdsassociates.com

3 Schedule

The following schedule and deadlines apply to this solicitation:

Event	Date
Issue RFP	December 5, 2018
Respondents’ Questions Due	January 11, 2019
Responses to Respondents’ Questions Due	January 21, 2019
Proposals Due	February 1, 2019
Short-List Notification / Commence Negotiations	March 22, 2019
Complete Contract Negotiations / Execute Contract	May 1, 2019
Facility COD / Commencement of Service	January 1, 2020

The proposal process begins with the issuing of this RFP on **December 5, 2018**, and will continue until **February 1, 2019**, (the "Proposal Due Date") for the submission of proposals. Responses to this RFP received after the Proposal Due Date may, in the sole discretion of VMEA, be deemed non-responsive and given no further consideration in this RFP process.

All questions should be sent via e-mail to GDS Associates (i.e. the email address shown in Section 2) by no later than **January 11, 2019**. Only written responses to Respondents' questions will be considered official RFP correspondence and VMEA will make responses to questions available to all potential Respondents via the RFP website as soon as possible, but by no later than **January 21, 2019**.

Should any addenda to the RFP be necessary, such addenda will be issued via the RFP website and potential Respondents are expected to monitor the RFP website for updates.

4 Background Information

Information contained in this RFP is provided for background use only. VMEA makes no representation that the information is complete or applicable to any Respondent's Proposal. The following is a general description of VMEA and its intended operation of the BESS.

VMEA is an association which operates as a not-for-profit corporation incorporated under the laws of the Commonwealth of Virginia. VMEA's members' annual peak demand is approximately 300 MW and have load requirements of approximately 1,500 GWh. VMEA's membership consists of seven, independent municipal utilities located in Virginia. Each member of VMEA provides retail electric service to residential, commercial, and industrial customers. Each municipality owns and operates an electric distribution system, which provides the capability to accept delivery of power and energy from the Dominion transmission system and concurrently delivers that power and energy to its retail customers.

VMEA supplies the majority of its power and energy to its members via a long-term power supply arrangement with Dominion. VMEA has some flexibility in managing its contribution to the PJM transmission peak demand as well as its monthly coincident peak demand within the Dominion LSE control area. VMEA intends to own and operate BESS facilities to manage its coincident peak demands with PJM and Dominion LSE.

VMEA anticipates cycling the BESS 50-100 times per year, 4-8 times per month, and normally, only 1 time per day; however, there is the potential for VMEA to need to dispatch the BESS up to 2 times per day in winter months. For each cycle, VMEA anticipates charging the BESS during off-peak, overnight hours and discharging the BESS during potential coincident peak conditions (i.e. on-peak periods). In an effort to maximize peak demand reduction, VMEA anticipates fully discharging the battery during each cycle. VMEA anticipates that it will have full operational, but remote, control of the dispatch of the BESS system as VMEA has experience with the forecasting and timing of these potential coincident peaks.

The BESS project will be sited at and controlled by one of VMEA's members, Harrisonburg Electric Commission ("HEC") on behalf of all VMEA members. HEC plans to locate the BESS project at its East Market Street substation, which is a 230 kV substation interconnected to the Dominion transmission system and distributes power on the HEC distribution system at 23 kV. The potential BESS project would be interconnected on HEC's 23kV distribution system. The East Market Street has an average monthly peak demand of approximately 20 MW.

5 Proposal Content

VMEA requires that all Proposals submitted pursuant to this RFP contain, at a minimum, include turnkey pricing (i.e. total installed cost as well as any ongoing expenses) and an estimated COD for the following BESS facilities:

BESS Capacity	BESS Duration
2, 6, 8, 10, and 12 MW	1 and 2 Hours

Respondents should also include the following information as part of the proposal:

1. EPC, turn-key installed cost
2. BESS technical specification sheets, including useful life estimates, charge rates, roundtrip efficiency, degradation rates, and expected losses (MV Transformer and HVAC)
3. Power ratings (Inverter Real Power and MV Transformer Power Rating)
4. Dispatch algorithm capabilities
5. Communications and control infrastructure costs to communicate with VMEA (full remote access, data transfer and collection, cloud storage, Wi-Fi connectivity, real-time data monitoring, performance measuring, virtual private network)
6. Installation, site development, and interconnection cost requirements (upon full knowledge of VMEA site constraints such as civil engineering characteristics and interface details such as transformer, voltage, protection scheme, and power quality)
7. Balance of system auxiliary load characteristics and operating requirements
8. Mechanical and environmental cost requirements (upon full knowledge of VMEA site details) including the power station service to run internal HVAC system
9. Local utility and jurisdictional safety requirements (such as fire protection and alarm protocols)
10. Cybersecurity requirements (based on the National Institute of Standards and Technology “Framework for Improving Critical Infrastructure Cybersecurity”, Version 1.1, April 16, 2018)
11. Operations and maintenance expenses and requirements (startup and shutdown characteristics, planned maintenance requirements, estimates of unplanned maintenance requirements, redundancy, failure modes, resilience to loss of offsite power/power supply, and availability)
12. Warranty and/or extended warranty pricing (general performance guarantee, operation under the desired use case, any oversizing incorporated to provide additional security or extended life, controls and programming specifications)

VMEA will review and may utilize information, if any, submitted by a Respondent, which is not specifically requested as a part of the RFP. VMEA reserves the right to request additional information from Respondents during the proposal evaluation process.

6 Evaluation Criteria

Proposals will be evaluated based on their ability to meet VMEA's need for an economical and reliable BESS arrangement. Respondents to this solicitation should provide all relevant information necessary to allow VMEA to conduct a thorough analysis of their proposal(s). The Respondent should clearly explain the pricing and breakdown of the components under the proposal so that VMEA can evaluate the total price of the BESS under the terms of the proposal. Proposals will be analyzed over a range of scenarios defined by price and non-price variables.

Prospective Respondents are advised that price will be important in VMEA's evaluation, however, proposals will also be compared and evaluated on non-price or qualitative criteria. Therefore, the lowest price submittal may not be selected. The proposal should include sufficient detail to evaluate all fixed and variable charges associated with the proposal.

The principal criteria to be used by VMEA in evaluating Proposals include, but are not limited to:

1. Total turnkey capital and O&M cost of the BESS
2. Construction schedule and COD
3. Financial viability of the Respondent, including its parent or any other guarantor of services under the Respondent's Proposal
4. Key team members for the Respondent, relevant project management experience and capability, and related project experience
5. Possible conflicts of interest and any legal claims
6. Jobsite safety history
7. Operational viability of the Respondent
8. Respondent's history of BESS projects / list of references
9. Cost of compliance with the environmental protection requirements of all applicable state and federal laws, rules and orders

Each of these factors is critical to the successful integration of a BESS resource into VMEA's overall power supply arrangements. VMEA reserves the right to consider any other factors that VMEA deems to be relevant to the successful integration and operation of the BESS.

7 Respondent Qualifications and Experience

Respondents shall have successfully completed two other BESS projects similar in size and scope to the service that they are proposing in this RFP. Respondents must demonstrate that they have the financial and technical wherewithal to meet all obligations in their proposals.

8 Confidentiality and Reserved Rights

All proposals shall become the property of VMEA. VMEA will not disclose to third parties any information contained in a proposal that is clearly labeled "CONFIDENTIAL" unless such disclosures are required by law or by order of a court or government agency having appropriate jurisdiction. VMEA reserves the right to disclose proposals to its consultant for the purpose of assistance in evaluating proposals and VMEA will require the consultant to maintain the confidentiality of the document. Notwithstanding the foregoing, nothing set forth herein shall prevent VMEA from fully complying with its obligations under the Virginia public records law. This RFP is solely an invitation to submit proposals.

VMEA reserves the right to:

- reject any and all proposals received in response to this RFP for any reason or no reason;
- waive any requirement in this RFP;
- negotiate BESS arrangements with more than one Respondent simultaneously;
- terminate negotiations;
- not select the proposal with the lowest price; and
- request clarifications from Respondents at any time.

9 Incurred Costs

All costs directly or indirectly related to the preparation of a proposal in response to this RFP shall be the sole responsibility of and shall be borne by the Respondent(s) incurring such costs. VMEA shall not reimburse any Respondent for any costs incurred in the preparation or submission of a proposal and/or in negotiating an agreement as a result of a proposal.

10 Contract Incorporation

Respondents should be aware that the contents of a selected proposal might become a part of any subsequent contractual agreements. If VMEA decides to move forward with a “short-list” of one or more Respondents, it will negotiate contracts with such Respondents that will embody the general principles and concepts established in the Respondent’s proposal(s). In the event negotiations with a Respondent do not, within a reasonable period of time, produce a contract satisfactory to VMEA, it reserves the right to terminate those negotiations and pursue other BESS options available to it including, without limitation, entering into negotiations with other parties. Any final contract(s) that result from the proposal evaluation and negotiation processes will be subject to approval by the VMEA Board.

11 Rejection of Proposals

VMEA reserves the right to accept any proposal(s), or to reject any and all proposals and to re-issue this RFP in the event that all proposals are rejected or they deem it otherwise necessary. VMEA reserves the right to revise this RFP, including the desired capacity and duration specifications, at any time. Additionally, VMEA reserves the right to accept proposals other than the lowest cost proposal. Factors other than cost, as described above, will be considered in the proposal evaluation process.

12 Supplemental Information

VMEA reserves the right to request additional information from Respondents or to request Respondents to submit supplemental materials in fulfillment of the content requirements of this RFP or to meet additional information needs of VMEA. VMEA also reserves the right to waive any technical or format requirements contained in the RFP.

13 Submittal Instructions

One electronic copy of the proposal should be emailed to Ryan Johnson at GDS Associates. Each Respondent is expected to carefully review the information provided in this RFP as it contains important instructions which should be followed in preparing the proposal(s). Modifications to proposals already received by VMEA will only be accepted if submitted in writing by the Respondent prior to the Proposal Due Date. Proposals must be electronically delivered no later than 4:00 p.m. Eastern, **February 1, 2019**.

Attention:	Mr. Ryan Johnson, PE Senior Project Manager
Phone:	770-799-2351
Email:	Ryan.Johnson@gdsassociates.com

Copies of each Proposal will be forwarded to VMEA and their legal counsel.