GOVERNMENT OF THE DISTRICT OF COLUMBIA

DEPARTMENT OF GENERAL SERVICES

Contracts and Procurement Division

DETERMINATION AND FINDINGS
FOR A
SPECIAL PILOT PROCUREMENT

CAPTION	**Microgrid Analysis Project**
PROPOSED CONTRACTOR	**Metropolitan Washington Council of Governments**
PROGRAM AGENCY	**DC Department of General Services**
AUTHORIZATION	**D.C. Official Code 2-354.08, 27 DCMR 4723**

1. **SUMMARY**:
   The Department of General Services ("DGS" or the "Department") seeks to engage in a pilot program to test new technology designed to increase energy reliability and security, lower energy costs, decrease greenhouse gas emissions, and reduce peak load in municipal buildings (i.e., the St. Elizabeth campus). Microgrids are localized grids that can disconnect from the traditional grid to operate autonomously and help mitigate grid disturbances to strengthen grid resilience. The department will conduct first order engineering and economic analysis of microgrid development for the St. Elizabeth campus in Washington, DC using a tool called Distributed Energy Resources Customer Adoption Model (DER-CAM).

2. **PRICE**:
   The estimated annual is not to exceed $50,000.00

3. **TERM**:
   From April 24, 2015 through December 31, 2015

4. **FACTS WHICH JUSTIFY SINGLE AVAILABLE SOURCE PROCUREMENT**:

   The Department of General Services is charged with a wide range of real estate management functions for various District government client agencies, including the purchasing and

management of utilities for buildings within the real estate portfolio of DGS. As part of the District's overall commitment to sustainability, DGS seeks to elevate the standards of the District's operation and management of District facilities, in a manner that is environmentally conscious and reduces the District's overall carbon footprint. In executing its mission, DGS has endeavored to be a leader in implementing sustainable initiatives and incorporating cutting-edge green technologies and processes. As part of its recent efforts to implement sustainability initiatives and make environmentally conscious decisions, DGS has implemented industry-leading energy monitoring across the portfolio to better understand the specific dynamics of energy consumption within individual DGS buildings.

The Metropolitan Washington Council of Governments (COG) is an independent, non-profit association that brings area leaders together to address major regional issues in the District of Columbia, suburban Maryland and Northern Virginia. For more than 55 years, COG has helped tackle metropolitan Washington's biggest challenges, such as restoring the Potomac River, ensuring the Metro system was fully built, strengthening emergency preparedness after September 11, 2001, and today, modernizing the region's energy infrastructure. DGS seeks to enter into an agreement with COG to pilot a program to support market transformation and adoption of leading edge technologies, and further, to support a flexible and efficient electric grid, by enabling the integration of growing deployments of renewable sources of energy such as solar and wind and distributed energy resources such as combined heat and power, energy storage, and demand response.

The project will involve a tool called the Distributed Energy Resources Customer Adoption Model (DER_CAM) to conduct first order engineering and economic analysis of microgrid development options for District of Columbia facilities. The DER_CAM is an economic and environmental model of customer DER (distributed energy resource) adoption. This model has been in development at Berkeley Lab since 2000. The objective of the model is to minimize the cost of operation on-site generation and combined heat and power (CHP) system, either for individual customer site or a Grid. The model chooses which distributed generation (DG) and/or CHP technologies a customer should adopt and how that technology should be operated based on specific site load and price information, and performance data for available equipment options. The application is well suited to supporting community efforts to design and implement microgrid projects.

COG, through its partnership with the Lawrence Berkeley National Lab (LBL) in analyzing microgrid projects in the Washington, DC region, will grant DGS access to the DER-CAM tool, provide training, and assist in the microgrid analysis. For the District, COG will use the DER-CAM tool to evaluate microgrid options for the St. Elizabeth's campus in Washington, DC (and two other sites to be determined).

Project Tasks include, but are not limited to:

- TRANSFER OF DER-CAM TOOL (license)
    - Establish DER-CAN Capacity at COG, DC.
- DATA – MICROGRID CANDIDATES
    - Data Collection
    - Data entry
- ANALYSIS OF MICROGRID SITE
    - Design of Model Runs

    - Running Model
    - Analysis – Optimal microgrid configuration
- REPORT
    - Feasibility Study: recommendations for implementation
- TRAINING & DEMONSTRATION
    - Technology Exchange (manual, training material)
    - COG will develop and implement training on the use of the DER-CAM model
    - Demonstrate the results of the feasibility study

5. **NOTICE REQUIREMENT**:
   The notice of intent requirement to use the special pilot procurement method will be full-filled by publication of this Determination & Finding on the DGS website for at least ten (10) days.

CERTIFICATION OF FACTS

I certify that the above facts are true, correct and complete to the best of my knowledge.

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Date

Zach Dobelbower
Sustainability Program Manager

DETERMINATION

Based upon the above findings and in accordance with the cited authority, I hereby determine that the facts described above justify a special pilot procurement to the Metropolitan Washington Council of Governments to supply predictive energy optimization technology in accordance with section 4723 of the Department's procurement regulations. Further, I hereby determine that is not feasible or practical to invoke the competitive solicitation process under with Section 402 or 403 of the District of Columbia Procurement Practices Reform Act of 100 (D.C. Law 18-371; D.C. Official Code S 2-354-02 or 2-354.03). Accordingly, I determine that the District is justified in using the special pilot procurement process.

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Date

Jonathan Kayne
Interim Director & Chief Contracting Officer