



# Metropolitan Water Reclamation District of Greater Chicago

100 East Erie Street  
Chicago, IL 60611

## Legislation Text

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### **TRANSMITTAL LETTER FOR BOARD MEETING OF AUGUST 7, 2014**

#### COMMITTEE ON PROCUREMENT

Mr. David St. Pierre, Executive Director

Issue a purchase order and enter into agreement with Anaergia Services, LLC, for professional engineering services and for authority to negotiate a long-term agreement for supply of organic waste material, for Contract 13-RFP-06, Biogas Renewable Energy Project at the Calumet Water Reclamation Plant, in an amount not to exceed \$2,434,000.00, Account 201-50000-601420, Requisition 1376700

Dear Sir:

Authorization is requested to issue a purchase order and enter into an agreement with Anaergia Services, LLC, Inc. for professional engineering services and for authority to negotiate a long-term agreement for supply of organic waste material associated with Contract 13-RFP-06, Biogas Renewable Energy Project at the Calumet Water Reclamation Plant (Project No. 11-240-3P Organic Waste Receiving and Processing Facility, Calumet Water Reclamation Plant).

A Request for Proposals, 13-RFP-06, Biogas Renewable Energy Project at the Calumet Water Reclamation Plant (CWRP), was advertised on March 13, 2013, soliciting proposals for the engineering design and construction of a facility or facilities for the beneficial use of digester gas at the CWRP. This was an open RFP. The overall objective of the RFP was to reduce the District's energy footprint by maximizing the production and beneficial use of digester gas, also known as biogas, as a renewable energy resource in a manner that is economically beneficial, energy efficient, and environmentally responsible. The purpose of the RFP was to identify a highly reputable and experienced contractor to design and build a system for producing renewable energy from the biogas generated in the CWRP's existing anaerobic digesters.

Nine proposals were received from the following firms or teams:

1. Ameresco, Inc.
2. Anaergia Services, LLC
3. Green Recycling Technologies, Inc.
4. Honeywell International and CH2M Hill
5. Innovative Energy Solutions, Ballard Engineering, IHC Construction Partnership
6. Meade Electric Company, Inc.
7. Midwestern Electric, Inc, Leopardo Companies, Inc., and Project Integration Joint Venture
8. MWH Americas, Inc.
9. Natural Systems Utilities, Green Seed Energy, and Middlesex Water Company (NSU)

After review of the initial proposals, it was determined that it would be in the District's best interest to break the proposals into component options, such that the overall project goals could be met by combining the best components from different proposers. Therefore, firm price proposals for specific project options were solicited from the short-listed teams Ameresco, Inc., Anaergia Services, LLC, and NSU. Subsequently, Best and Final Offers (BAFO) were solicited on March 20, 2014 from the same three short-listed firms. The responses to the

BAFOs provided firm price proposals for engineering design, construction, and a Five Year Maintenance Plan.

The Selection Advisory Committee panel's independent ratings, when compiled, show the Organic Waste Receiving and Processing Facility option proposed by the Anaergia Services, LLC team to be the most advantageous to the District for utilizing excess digester capacity to increase biogas production. This team's strengths include expertise in design/build projects, an excellent project manager and design team, reliable technology, experience with wastewater treatment plants and numerous full-scale installations related to biogas and digestion. A separate transmittal letter is presented on this agenda for the digester gas utilization option that was also highly rated.

The project work will be accomplished in four separate agreements with Anaergia Services, LLC. The first two agreements, which are the subject of this transmittal letter, are for engineering design services and for long-term supply of organic waste material. The level of expertise required for the engineering design agreement consists of engineers and draftsmen experienced in process, structural, mechanical, electrical, and civil engineering design. When engineering design has progressed sufficiently such that plans and specifications have been developed to the satisfaction of the District, a transmittal letter will be submitted to the Board of Commissioners for authority to enter into the third agreement with Anaergia Services, LLC for the construction work. Subsequently, a transmittal letter will be submitted to the Board of Commissioners for authority to enter into the fourth agreement, which is the Five Year Maintenance Plan. While personnel from the Maintenance and Operations Department will operate and maintain the organic waste receiving and processing facility equipment on a daily basis, the Five Year Maintenance Plan provides for on-call technical support, service, and parts for issues beyond routine maintenance, and for annual inspection of equipment by factory-certified technicians.

The overall scope of work includes construction of a new organic waste receiving and processing facility, including receiving pits for a variety of organic waste types, screens, transfer pumps, transfer piping, and an odor control system, located south of the anaerobic digesters; modifications to two existing digesters including fixed covers, mixers, and digester gas collection piping; and a 20-year agreement with the proposer to provide organic waste material. Project deliverables for engineering design services include construction contract documents and construction cost estimates. Under the long-term organic waste supply agreement, the proposer proposes to provide approximately 200,000 gallons per day of waste organic material, consisting of the organic fraction of wet commercial waste, such as food waste, fats, oils and greases, and liquid organic waste. The proposer proposes to install equipment at an off-site trash transfer station to extrude the organic waste fraction from wet commercial waste, and then transfer this waste as a slurry in enclosed box trailers to the new organic waste receiving and processing facility at CWRP. The cost of the extrusion equipment is solely the responsibility of the proposer. The proposer estimates that six new private sector jobs will be created at the off-site trash transfer station. The long-term supply agreement will include a negotiated tipping fee payable to the District. It is expected that the additional organic waste stream will increase annual average digester gas production by approximately 160%. In addition, it is estimated that the diversion of the organic waste streams away from landfills will offset annual greenhouse gas emissions by approximately 99,000 metric tons of carbon dioxide equivalent through reduction of landfill gas flaring and fugitive emissions.

The total fee for the engineering design agreement is \$2,434,000.00, to be distributed over approximately one and one-half years. The approximate time allowed for services to be performed under this agreement is 540 days from the date the contract is awarded. Approximately 20 personnel will be employed in the execution of this work. Resumes were submitted for the key personnel involved in the process and design engineering.

When the construction phase of this project is awarded, it is anticipated that approximately 40-50 jobs will be created.

The time frame for the organic waste supply agreement is 20 years. There is no additional cost to the District for this agreement. This agreement will stipulate limitations on daily volumes of organic waste material to be

delivered, limitations on the constituency of the waste streams, controls on delivery times, tipping fees, and terms for quantity measurement. The RFP provided indicative terms and conditions for the organic waste supply agreement. Once the final terms and conditions have been negotiated, a request will be made to the Board to approve the agreement.

Upon completion of design, a request will be made to the Board to enter into an agreement with Anaergia Services, LLC for the construction of the designed facilities. The current price proposal for the construction portion of the work is \$26,926,183.00. Based on the final outcome of the design, the price proposal for the construction work will be adjusted as necessary prior to award. As construction nears completion, a request will be made to the Board to enter into an agreement with Anaergia Services, LLC for the Five-year Maintenance Plan. The price proposal for the Five Year Maintenance Plan is \$1,251,305.00. Based on a final review of District needs at that time, the price proposal for the Five Year Maintenance Plan will be adjusted as necessary prior to award.

All MBE/SBE and WBE/SBE firms will actively participate in providing services for the core elements required by the design Agreement. The firms Rubinos & Mesia and Milhouse Engineering are Minority-Owned Business Enterprises/Small Business Enterprises (MBE/SBE) firms. The firms O'Brien & Associates, McBride Engineering, and Direct Steel are Women-Owned Business Enterprise/Small Business Enterprise (WBE/SBE) firms.

The engineering design agreement with Anaergia Services, LLC will be in accordance with the District's Affirmative Action Policy. Affirmative Action participation goals for the Consulting (Design) services are 20% Minority-owned Business Enterprises (MBE), 10% Women-owned Business Enterprises (WBE), and 10% Small Business Enterprises (SBE). Anaergia Services, LLC is committed to compliance with the District's Affirmative Action policy and these goals. Discussions with PCE firms have been initiated and all MBE/SBE and WBE/SBE firms will actively participate in providing services for the core elements required by the agreement.

Inasmuch as the firm of Anaergia Services, LLC possess a high degree of professional skill, it is recommended that the Director of Procurement and Materials Management be authorized to issue a purchase order and enter into an agreement without advertising, per Section 11.4 of the Purchasing Act, in an amount not to exceed \$2,434,000.00.

Funds are available in Account 201-50000-601420.

Requested, Catherine A. O'Connor, Director of Engineering, TK  
Recommended, Darlene A. LoCascio, Director of Procurement and Materials Management  
Respectfully Submitted, Barbara J. McGowan, Chairman Committee on Procurement  
Disposition of this agenda item will be documented in the official Regular Board Meeting Minutes of the Board of Commissioners for August 7, 2014