



# Metropolitan Water Reclamation District of Greater Chicago

100 East Erie Street  
Chicago, IL 60611

## Legislation Details (With Text)

**File #:** 14-0859 **Version:** 1  
**Type:** Agenda Item **Status:** Deleted  
**File created:** 7/29/2014 **In control:** Procurement Committee  
**On agenda:** 8/7/2014 **Final action:** 8/7/2014  
**Title:** Issue a purchase order and enter into agreement with Ameresco, Inc., for professional engineering services and for authority to negotiate a long-term agreement for off-take of digester gas for Contract 13-RFP-06 Biogas Renewable Energy Project at the Calumet Water Reclamation Plant, in an amount not to exceed \$1,255,000.00, Account 201-50000-601420, Requisition 1376719

**Sponsors:**

**Indexes:**

**Code sections:**

**Attachments:**

Date	Ver.	Action By	Action	Result
8/7/2014	1	Board of Commissioners	Deleted	
8/7/2014	1	Committee of the Whole	Deleted	

### 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 Ameresco, Inc., for professional engineering services and for authority to negotiate a long-term agreement for off-take of digester gas for Contract 13-RFP-06 Biogas Renewable Energy Project at the Calumet Water Reclamation Plant, in an amount not to exceed \$1,255,000.00, Account 201-50000-601420, Requisition 1376719

Dear Sir:

Authorization is requested to issue a purchase order and enter into an agreement with Ameresco, Inc. for professional engineering services and for authority to negotiate a long-term agreement for off-take of digester gas for Contract for Contract 13-RFP-06 Biogas Renewable Energy Project at the Calumet Water Reclamation Plant (Project No. 14-250-3P Digester Gas Utilization, 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 High BTU option, proposed by the Ameresco, Inc. team, which would produce pipeline-quality gas, to be the most advantageous to the District for producing energy from biogas. This team's strengths include expertise in design/build projects, an excellent project manager and design team, reliable technology, experience with biogas projects. A separate transmittal letter is presented on this agenda for the organic waste receiving and processing facility option that was also highly rated.

The project work will be accomplished in four separate agreements with Ameresco, Inc. The first two agreements, which are the subject of this transmittal letter, are for engineering design services and for long-term off-take of digester gas supply. 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 Ameresco, Inc. 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 digester gas cleaning and pressurization 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 connection to the plant's digester gas collection piping system, installation of a pressure swing absorption gas cleaning system in the vicinity of the anaerobic digester complex, installation of gas compressors, installation of a gas pipeline and connection to Nicor's natural gas pipeline located near 138<sup>th</sup> Street south of the CWRP, and a 7-year off-take agreement and commitment to purchase the cleaned digester gas from the District. Project deliverables for engineering design services include construction contract documents, construction cost estimates and an Illinois Environmental Protection Agency air permit modification application. The projected quantity of cleaned digester gas to be sold to the pipeline is approximately 1,500 million BTU per day, which includes the additional digester gas production from added organic wastes. It is expected that use of cleaned digester gas will offset annual greenhouse gas emissions by approximately 9,000 metric tons of carbon dioxide equivalent per year.

The total fee for the engineering design agreement is \$1,255,000.00, to be distributed over approximately 13 months. The approximate time allowed for services to be performed under this agreement is 390 days from the date the contract is awarded. Approximately 15 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 20-30 jobs will be created.

The time frame for the cleaned digester gas off-take agreement is 7 years with three one-year renewal options. There is no additional cost to the District for this agreement. This agreement will stipulate the minimum daily volume of cleaned digester gas to be supplied, the specific quality requirements for the digester gas, the pricing components, gas production notification requirements to the off-taker, and the terms for payment to the District. The off-take pricing structure will include a percentage of the current Renewable Identification Number (RIN) and Low Carbon Fuel Standards (LCFS) values trading on the renewable energy market. The RFP provided indicative terms and conditions for the cleaned digester gas off-take 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 Ameresco, Inc. for the construction of the designed facilities. The price proposal for the construction portion of the work is \$13,027,788.00. 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 Ameresco, Inc. for the Five-year Maintenance Plan. The price proposal for the Five Year Maintenance Plan is \$550,829.00. 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 MPR Engineering and Primera Engineers are Minority-Owned Business Enterprises/Small Business Enterprises (MBE/SBE) firms. The firms Huff & Huff and McBride Engineering are Women-Owned Business Enterprise/Small Business Enterprise (WBE/SBE) firms.

The agreement with Ameresco, Inc. 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). Ameresco, Inc. 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 Ameresco, Inc. 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 \$1,255,000.00.

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