

**MEMORANDUM**

October 16, 2009

TO: County Council

FROM: *KL* Keith Levchenko, Senior Legislative Analyst

SUBJECT: Resolution to Approve a One Year Electricity Revenue Maximization Pilot Program at the Resource Recovery Facility (RRF) with the Northeast Maryland Waste Disposal Authority

**Council Staff Recommendation: Approve. T&E Committee review is scheduled for October 19.**

Those expected for this worksession:

Robert Hoyt – Director, Department of Environmental Protection (DEP)  
Dan Locke – Chief, Division of Solid Waste Services (DSWS)  
Bill Davidson – Chief, Northern Operations and Strategic Planning Section, DSWS

**Background**

On October 5, 2009 the Council received from the County Executive a request for approval of a modification to the Intergovernmental Agreement (IGA) with the Northeast Maryland Waste Disposal Authority (NMWDA) (see ©1) to allow for an electricity revenue maximization pilot program. During the pilot period, the current electricity-per-ton-of-waste performance standard would be replaced with monthly revenue generation guarantees.

The pilot program would allow Montgomery County to take advantage of peak versus non-peak electricity pricing. Montgomery County and Covanta Montgomery, Inc. (through the County's contract with NMWDA) would split the estimated increased revenue (55 percent to Montgomery County and 45 percent to Covanta). Minimum revenue guarantees provided by Covanta will provide estimated new revenue of \$115,000 to Montgomery County during the pilot period. In addition to the minimum guarantee, the County could receive an additional \$400,000 depending on actual energy sales revenue experience.

Section 5.2.1.2 of the Comprehensive Solid Waste Management 10 Year Plan requires contract changes affecting the RRF to be reviewed by the Council. If the Council does not act within 30 days or two Council worksessions (whichever is longer) the contract change is automatically approved.

A resolution (see ©3-6) was introduced on October 13. T&E Committee review is scheduled for October 19.

## **Discussion**

### RRF Background

The Resource Recovery Facility (RRF) is permitted by the State to handle a maximum of 657,000 tons of trash per year. The County's policy is to stay within an 85% to 92% utilization rate (558,450 to 604,000 tons). To stay within this policy level, the County has periodically adjusted the Tip Fee in order to either encourage or discourage haulers of multi-family and non-residential trash from utilizing the County's transfer station versus other facilities outside of Montgomery County.

For FY10, the Solid Waste budget assumed a tonnage burned of 575,000 tons. This tonnage level reflects a decrease from recent years and is attributed to current economic conditions. While the national and regional economy have shown signs of improvement in recent months, DSWS staff believe the actual FY10 tonnages will be very close to the budget assumption.

The costs of running the RRF (approximately \$60.6 million in FY10 of which debt service is about 44 percent of this cost) are substantially reduced by offsetting revenue raised through the sale of the generation of electricity at the RRF. Electricity is currently sold by NMWDA to Constellation Energy. The FY10 approved budget assumed revenue of approximately \$23 million this fiscal year.

The current contract includes a price differential between the sale of electricity at peak versus non-peak times. This 3 year contract expires at the end of FY10. A new electricity sale contract may be beneficial to continue beyond the pilot period depending on the terms of the new contract.

### Opportunity to Maximize Revenue during FY10

Given that tonnages are below the maximum policy level and that a peak/non-peak electricity price differential exists in the current contract, Covanta Montgomery, Inc. (the operator of the RRF) currently has a substantial amount of operational flexibility to adjust the throughput of the RRF to burn more trash during peak pricing times and less during other hours of the day. The trash pit capacity at the RRF is sufficient to hold trash volumes equaling approximately a week's worth of trash in case of a partial or total shutdown of the refuse boiler units, so a price maximization strategy that adjusts trash volume on an hourly basis does not present any operational concerns.

## Pilot Program

The current contract with Covanta requires the operator to provide a performance guarantee that a certain amount of electricity per ton of trash burned will be achieved. The pilot project would change this performance guarantee to focus on revenue generation.

The pilot project assumes a minimum revenue guarantee to the County (1.75% over current average pricing). Excess revenue above the 1.75% level would be split with Covanta (55% to the County and 45% to Covanta). As noted earlier, the County Executive projects the revenue guarantee alone to provide an additional \$115,000 in revenue with another \$400,000 likely under the revenue sharing parameters.

Covanta has been operating the RRF with this rate maximization assumption since the beginning of the fiscal year in good faith in anticipation of this FY10 pilot program being approved. An additional \$177,000 in revenue has already been collected so far this fiscal year as a result of this effort.

### **Council Staff Recommendation**

Council Staff recommends approval of the attached resolution (see ©3-6) establishing the revenue maximization pilot program for FY10.

### **Attachments**

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ENV & ENERGY



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MONTGOMERY COUNTY  
COUNCIL

2009 OCT -5 PM 3:30

KL  
CC  
SBF  
LL

Isiah Leggett  
County Executive

OFFICE OF THE COUNTY EXECUTIVE  
ROCKVILLE, MARYLAND 20850

-051641

MEMORANDUM

October 5, 2009



TO: Phil Andrews, President  
Montgomery County Council

FROM: Isiah Leggett, County Executive 

SUBJECT: One Year Electricity Revenue Maximization Pilot Program at the Resource Recovery Facility (RRF)

I am writing to inform you of a Pilot Electricity Revenue Maximization Program (Pilot Program) that I recommend for implementation during this current fiscal year at the County's Resource Recovery Facility (RRF) located in Dickerson.

During this Pilot Program, the Department of Environmental Protection's Division of Solid Waste Services (DSWS) will increase the total electricity revenue generated from the RRF by burning trash during "on-peak" electricity pricing periods to the greatest extent possible. Revenues are expected to increase under this pilot program for the County by approximately \$500,000 in FY10.

As background, the County entered into a Service Agreement (Agreement) with the Northeast Maryland Waste Disposal Authority (NMWDA) and Ogden Martin Systems of Montgomery, Inc., now known as Covanta Montgomery, Inc. (Covanta) on November 16, 1990, for the design, engineer, construction, and operation of the waste-to energy facility, the RRF.

The Agreement contains a performance guarantee, "The GKP Performance Standard," which encourages the operator to maximize the amount of electricity generated per ton of waste burned; unfortunately, it does not consider the beneficial effects of market pricing. Throughout this Pilot Program we are, in essence, replacing the GKP Performance Standard with a revenue guarantee. This revenue guarantee assures that the County will receive a revenue premium of 1.75 percent over average pricing plus 55 percent of the upside revenues beyond that point. Covanta, the RRF operator, guarantees (will pay out of pocket if revenue guarantee is not met) the 1.75 percent premium. In exchange, Covanta will receive a 45 percent share of upside revenues beyond the guarantee point. The fiscal bottom line is that we expect to gain about \$115,000 due to this new 1.75 percent guarantee alone and around an additional \$400,000 earned from the highly likely upside potential.

The RRF earns approximately \$21 million per year selling electricity through the NMWDA contract with Constellation Energy. Per this contract, that revenue is earned on a dollar per megawatt hour price basis (\$/MWH), which price varies hourly (on-peak vs. off-peak). For instance, in August during on-peak hours (7:00 AM to 11:00 PM), the County earned \$99/MWH, but during off-peak hours (11:01 PM to 6:59 AM), the County earned \$61/MWH.

Phil Andrews  
October 5, 2009  
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Finally, for comparison sake, the maximum that Covanta would have to pay the County if it failed to meet the GKP Performance Standard, would be a penalty of \$120,000. Covanta has never failed to meet the existing GKP Performance Standard, so we have never collected that penalty. Under the Pilot Program, the County can expect to actually realize gains of several times that amount. The Electricity Maximization Pilot Program contract modification terms are attached for your information.

In accordance with Section 5.2.1.2 c of the County's Comprehensive Solid Waste Management 10 Year Plan, I request that Council approve this proposed change to the Agreement between the County and the NMWDA. Reports on the results of the Pilot Program will be provided along with any future actions. Accordingly, a resolution is attached for Council review and approval.

If you have any questions, please feel free to call Bob Hoyt, Director, Department of Environmental Protection at 240-777-7781 or Daniel Locke, Chief, Division of Solid Waste Services, at 240-777-6402. Thank you for your consideration.

Attachment

cc: Bob Hoyt, Director, DEP  
Daniel E. Locke, Chief, DEP/DSWS

Resolution No.: \_\_\_\_\_  
Introduced: \_\_\_\_\_  
Adopted: \_\_\_\_\_

COUNTY COUNCIL  
FOR MONTGOMERY COUNTY, MARYLAND

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By: Council President at the request of the County Executive

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SUBJECT: Electricity Maximization Pilot Program

Background

1. The County entered into a Service Agreement (the Agreement) on November 16, 1990 with the Northeast Maryland Waste Disposal Authority and Ogden Martin Systems of Montgomery, Inc., now known as Covanta ("Covanta") for the design, engineering, construction, and operation of the waste-to energy facility known as the Montgomery County Resource Recovery Facility.
2. The Agreement contains a performance standard whereby the operator, Covanta, guarantees that it will generate a certain amount of electricity per ton of waste burned.
3. The County Department of Environmental Protection (DEP) determined that, due to the differences in on-peak versus off-peak electricity market prices, the pursuit of that standard inhibits the generation of maximum electricity sales revenue that could otherwise benefit the County.
4. In order to take maximum advantage of the beneficial effects of electricity market (on-peak versus off-peak) pricing, the County seeks to modify the Agreement by entering into a one year electricity revenue maximization pilot program (the Pilot).
5. The Pilot would temporarily replace the current electricity-per-ton-of-waste performance standard with a set of monthly revenue generation guarantees defined in terms of overall dollars earned per megawatt hour generated, assuring the County a substantially higher level of electricity sales than under current terms, plus the majority share of any electricity sales generated above those new guarantees.

6. Section 5.2.1.2.c of the County's Comprehensive Solid Waste Management Plan states:  
"The County must not approve, or allow to take effect, under either the Waste Disposal or Service Agreement, any material change in the capacity or operation, or any material reduction in performance or environmental standards, of the facility or the transportation system unless the Director of DEP has submitted the change to the County Council."
  
7. DEP finds that entering into the Pilot, which is scheduled to conclude on June 30, 2010, incorporates a more beneficial performance standard and at the same time will substantially increase the electricity revenue generated and credited to the County for the duration of the Pilot.

**Action**

The County Council approves the following action:

The attached contract modification for the Electricity Revenue Maximization Pilot Program at the County's Resource Recovery Facility between the County and the Northeast Maryland Waste Disposal Authority is hereby approved.

This is a correct copy of Council action.

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Linda M. Lauer, Clerk of the Council

**ELECTRICITY MAXIMIZATION PILOT PROGRAM CONTRACT  
MODIFICATION TERMS**

- 1) Covanta will operate the Dickerson Facility in a manner to maximize energy revenue by:
  - a. Burning the maximum amount of trash during On-Peak hours while conserving trash during Off-Peak hours.
  - b. Minimizing unscheduled down time on the turbine and boilers during On-Peak hours.
  - c. Properly maintaining or even improving the efficiency of the boilers and/or turbine.
- 2) A Revenue Sharing Guarantee is \$/MWh for each month is shown in Paragraph 12).
- 3) If Covanta performs such that the Average \$/MWh in a month is greater than the Revenue Sharing Guarantee for that month, Covanta will receive an energy incentive in that month equal to 45% of the additional revenue that was generated as a result of the performance.
- 4) The additional revenue generated above the Revenue Sharing Guarantee will be calculated as follows:
  - a.  $\text{Company Incentive} = (\text{Average } \$/\text{MWh of actual sales} - \text{Revenue Sharing Guarantee}) * \text{Actual MWh sold for the month} * 45\%$ .
  - b. Where the "Actual MWh sold for the month" is the MWh sold as stated by the purchaser of electricity.
  - c. The Average \$/MWh of actual sales is the total energy revenue for Energy, not inclusive of any revenues from the sale of capacity, renewable energy credits or any other environmental attribute, divided by the "Actual MWh sold for the month."
- 5) If Covanta fails to meet the monthly Revenue Sharing Guarantee, Covanta will pay damages equal to the shortfall in that month as calculated as follows:
  - a.  $\text{Covanta Shortfall} = (\text{Revenue Sharing Guarantee} - \text{Average } \$/\text{MWh of actual sale}) * \text{Actual MWh sold for the month}$ .
- 6) Covanta Incentive will be paid to Covanta on a monthly basis after the Authority receives its electricity revenues from the purchaser of the electricity.
- 7) Covanta Shortfall will be calculated and paid on a monthly basis.
- 8) The current Covanta Share of Electricity Revenue shall remain the same (Section 5.1 of the Service Agreement – Covanta receives 8% of the revenue up to \$960,000 per year) and Covanta Incentive or Covanta Shortfall will be calculated independently from Covanta Share of Electricity Revenue.
- 9) The Electricity Maximization Pilot Program will be conducted from July 1, 2009 through June 30, 2010.

- 10) During the time period of the Electricity Maximization Pilot Program, Covanta will not be responsible for meeting the existing contract terms for the Guaranteed Kilowatt Production (Section 5.4.2 of Schedule 5 of the Service Agreement).
- 11) All terms and conditions of the Service Agreement, including the Performance Standards, that are not expressly modified under the terms of this Amendment, shall remain in place.
- 12) Revenue Sharing Guarantee:

Month	Monthly Average Pricing based on Flat Generation	Revenue Sharing Guarantee (1.75% Increase of Pricing based on Flat Generation)
July 2009	\$80.72	\$82.13
August 2009	\$78.26	\$79.63
September 2009	\$58.51	\$59.54
October 2009	\$54.82	\$55.78
November 2009	\$55.80	\$56.78
December 2009	\$65.36	\$66.51
January 2010	\$80.35	\$81.75
February 2010	\$79.32	\$80.71
March 2010	\$70.09	\$71.32
April 2010	\$59.98	\$61.03
May 2010	\$55.59	\$56.57
June 2010	\$62.04	\$63.12

All capitalized terms used herein that are not defined herein have the meanings given such terms under the Service Agreement dated November 16, 1990 between the Authority and Covanta (as amended and supplemented).