



John A. Carey  
Inspector General

OFFICE OF INSPECTOR GENERAL  
PALM BEACH COUNTY



Inspector General  
Accredited

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*“Enhancing Public Trust in Government”*

**Audit Report**  
**2018-A-0006 WB**  
**Palm Beach County**  
**Water Utility Department**  
**System Efficiency Credit**  
**May 1, 2018**



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**AUDIT REPORT  
2018-A-0006 WB**

**DATE ISSUED: MAY 1, 2018**



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**PALM BEACH COUNTY WATER UTILITY DEPARTMENT - SYSTEM EFFICIENCY CREDIT**

**SUMMARY**

**WHAT WE DID**

The Palm Beach County Office of Inspector General (OIG) conducted an audit of the System Efficiency Credit that the Palm Beach County (PBC) Water Utility Department (WUD) provided to Seacoast Utility Authority (Seacoast Utility). This audit was performed as a result of a whistle-blower complaint. Based on the allegations, we initiated a limited scope audit relating to the System Efficiency Credit.

The whistle-blower's allegations that were reviewed are as follows:

**Allegation (1):** The PBC WUD Director did not have authority to issue a credit to Seacoast Authority because a past similar credit required PBC Board of County Commissioners (BCC) approval;

**Allegation (2):** The calculation for the credit was flawed and inaccurately calculated; and

**Allegation (3):** Any unrealized savings as a result of this credit would be a violation of PBC WUD bond covenants.

On February 6, 2018, the whistle-blower reported an additional allegation:

**Allegation (4):** The accounting treatment of the credit was not accurately presented in PBC WUD's accounting records.

Our audit focused on (1) addressing the complainant's allegations, (2) determining whether controls were adequate related to the System Efficiency Credit and calculation, and (3) assessing the reliability, accuracy, and authorization for issuing the System Efficiency Credit. We reviewed activities, transactions, documents, correspondence, and agreements relevant to PBC WUD's issuance of the System Efficiency Credit to Seacoast Utility.

Pursuant to §112.3188(1), Florida Statutes (The Whistleblower Act), based on the nature of the information disclosed to the OIG, one or more individuals were recognized as a Whistleblower and the OIG subsequently initiated a Whistleblower audit.

## WHAT WE FOUND

In relation to the concerns expressed, we found:

**Allegation (1) and Allegation (2):** See Finding #1 for further details. We found that PBC WUD lacked proper approval or authorization to provide the System Efficiency Credit to Seacoast Utility. Our audit identified **\$582,446** in questioned costs.<sup>1</sup>

### **Systems Efficiency Credit**

On April 4, 2017, the BCC approved a First Restated Interlocal Agreement (Agreement) between the County and Seacoast Utility for the purchase and sale of bulk potable water and wastewater service for a term of thirty (30) years, with automatic renewal periods. The Agreement requires a written instrument signed by both parties in order to amend, modify, or supplement the terms of the Agreement. The only parties authorized to modify the agreement are the BCC and Seacoast Utility.

On April 27, 2017, the PBC WUD Director provided Seacoast Utility with a one-time, limited System Efficiency Credit in the amount of \$582,446 in conjunction with Seacoast Utility's purchase of a capacity reservation for potable water and wastewater service. The System Efficiency Credit was provided to reduce the upfront costs for the reservation of additional capacity.

By providing the System Efficiency Credit, PBC WUD essentially reduced the capacity reservation cost to Seacoast Utility in the Agreement from \$2,089,000 to \$1,506,554. In October 2017, Seacoast Utility paid capacity reservation fees net<sup>2</sup> of the System Efficiency Credit. There was no written document signed by both the BCC and Seacoast Utility authorizing the modification of the Agreement to reduce Seacoast Utility's capacity reservation cost. Although PBC WUD determined that it had proper authority to issue the System Efficiency Credit under the Uniform Policies and Procedures Manual (UPAP), we concluded that the credit was not properly issued. As a result, we questioned costs of **\$582,446** for the System Efficiency Credit provided.

**Allegation (3) and Allegation (4):** See Finding #2 for further details.

### **Revenue Accounting**

PBC WUD did not account for the capacity reservation fees and the System Efficiency Credit in accordance with proper revenue recognition principles.<sup>3</sup> Accounting transactions related to revenue recognition shall disclose the full amount of the revenue and any credits issued that provide a discount. The System Efficiency Credit was not recorded in the accounting records and the Agreement revenue was understated.

**Additional Matters Found:** The System Efficiency Credit may meet the definition of

<sup>1</sup> Questioned costs are costs or financial obligations that are questioned by the OIG because of an alleged violation of a provision of a law, regulation, contract, grant, cooperative agreement, other agreement, policies and procedures, or document governing the expenditure of funds; a finding that, at the time of the OIG activity, such cost or financial obligation is not supported by adequate documentation; or, a finding that the expenditure of funds for the intended purpose is unnecessary or unreasonable. As such and in this specific case, not all questioned costs are indicative of potential fraud or waste.

<sup>2</sup> The total revenue for the purchase of additional capacity less the System Efficiency Credit equals the net fee amount.

<sup>3</sup> FASB 605.50 – Financial Accounting Statement Board Revenue Recognition – Customer Payments and Incentives

an economic incentive and may need to be reported to the State of Florida Office of Economic and Demographic Research by the end of Fiscal Year (FY) 2018.

#### WHAT WE RECOMMEND

Our report contains two (2) findings and offers three (3) recommendations. Implementation of the recommendations will 1) assist PBC WUD in strengthening internal controls and 2) assist PBC WUD in complying with agreements.

The PBC WUD concurred and accepted all of the recommendations.

We have included PBC WUD's management response as Attachment 1.

The whistleblower was provided the opportunity to review the audit report. We have included the whistleblower's response as Attachment 2. The whistleblower signed a "Waiver to Release Whistle-Blower Identity"; therefore, attachment 2 was not redacted.

*While the Palm Beach County Water Utility Department Director did not comply with the Agreement in providing the credit, the Director stated he acted in the manner based on his belief that he had proper authority and the System Efficiency Credit was in the best interests of the utility ratepayers to reduce water waste and increase operating efficiency and revenues.*

**BACKGROUND**

The PBC WUD is a utility governed by the BCC. The PBC WUD provides potable water, wastewater, and reclaimed water services to approximately 578,000 people located within approximately 1,300 square miles of primarily unincorporated areas of the County. Through interlocal agreements, the PBC WUD also provides services directly to several municipalities. As an operating unit of the BCC, the PBC WUD reports directly to PBC County Administration.

In 2017, a water bottling company considered locating its operations to the Park of Commerce (the "Park") in Palm Beach County. Seacoast Utility supplied water services to the Park. In 2006, Seacoast Utility and Palm Beach County executed a Bulk Water Agreement, but the agreement had expired prior to 2017. Consequently, PBC WUD conducted a new rate study to determine the proper rates for a new agreement with Seacoast Utility. The new rates based on the new rate study were higher than the rates set forth in the 2006 agreement.

On April 4, 2017, the BCC approved and entered into the Agreement between the BCC and the Seacoast Utility for the purchase and sale of bulk potable water and wastewater service. The Agreement states that the County agrees to provide Seacoast Utility with potable water and waste water service for a monthly commodity fee and with an option to reserve permanent capacity in the County's potable water and wastewater systems contingent upon payment of a capacity fee no less than thirty (30) days prior to service activation. In order to meet demands created from additional growth and economic development in Northern Palm Beach County, Seacoast Utility sought to reserve additional potable water and wastewater capacity in the PBC WUD potable water and wastewater systems. Based upon the terms of the Agreement, Seacoast Utility would have had to pay the County \$2,089,000 for the additional capacity for portable water and wastewater service desired (\$1,520,000 for potable water - 400,000 gallons at \$3.80 per gallon; \$569,000 for wastewater - 100,000 gallons at \$5.69 per gallon).

During our audit interviews, the PBC WUD Director stated that as a result of the Agreement's increased rates, Seacoast Utility could not supply water to the Park at rates acceptable to the water bottle company; thus, the water bottling company decided not to pursue the location in the Park.

In an attempt to examine ways to provide service to Seacoast Utility at the lowest cost, PBC WUD evaluated the benefit to PBC WUD water distribution systems in an effort to find a solution that would encourage the water bottling company to reconsider its decision not to pursue the location in the Park. PBC WUD, Seacoast Utility, and Palm Beach County business development organizations held discussions to consider options.

The Agreement between the PBC and Seacoast Utilities set forth the methodology for calculating the capacity fee. PBC WUD subsequently retained an outside consultant to

calculate a “System Efficiency Credit.” In a letter dated April 26, 2017, the consultant set forth its “rationale and calculations for a recommended System Efficiency Credit that may be offered to the Seacoast Utility Authority (Authority) in accordance with the April 4, 2017 Bulk Service Agreement between Palm Beach County (County) and the Authority.” The consultant calculated the System Efficiency Credit of \$582,446 based on operating cost savings due to avoided water line flushing expenses over the next four years. The term “System Efficiency Credit” is not defined or referenced in any PBC policies or guidelines or in the Agreement between the parties. The term appears simply to have been used to describe the credit given to Seacoast Utility in this instance only.

The PBC WUD Director decided to accept the outside consultant’s proposed credit amount and issued the credit to Seacoast Utility. On April 27, 2017, the PBC WUD Director sent correspondence to the Executive Director of Seacoast Utility offering Seacoast Utility Authority “a one-time, limited System Efficiency Credit that may be structured as a reduction in the upfront costs payable by the Authority for Project Beach Ball’s reservation of 350,000 gallons per day of water system capacity.” The PBC WUD Director stated that this credit was provided based on the operating cost savings due to avoided water line flushing expenses over the next four years.

On October 10, 2017, the Seacoast Utility Authority delivered a check to PBC WUD in the amount of \$1,533,554, which represented the amount of capacity reservation fees (i.e. revenue) net of the System Efficiency Credit of \$582,446. The letter accompanying the payment specifically states that the check was submitted “in accordance with the First Restated Interlocal Agreement Between Palm Beach County and Seacoast Utility Authority for the Purchase and Sale of Bulk Potable Water and Wastewater Service between Palm Beach County and Seacoast Utility Authority approved by the Palm Beach County Board of County Commissioners on April 4, 2017...” The letter reflected capacity fees paid in an amount per gallon lower than the amount set forth in the Agreement.

### **PBC WUD Uniform Policies And Procedures (UPAP)**

During our discussions with the PBC WUD Director after we engaged this audit, the Director asserted that he believed he had proper authority to issue the System Efficiency Credit under the UPAP in **CHAPTER 2 CUSTOMER SERVICE**, Section 2 **BILLING**, which states,

#### **2.2.18 ADMINISTRATIVE CREDITS**

At the discretion of the Department Director, Assistant Director of Engineering & Environmental Health & Safety, or Assistant Director, credits may be applied to accounts based on unusual and extenuating circumstances which shall be explained in the account comments.

Although the PBC WUD Director’s authority to provide “Administrative Credits” seems to be very broad, based upon our review of the documentation provided by PBC WUD, including the UPAP, it does not appear that the PBC WUD Director considered the “Systems Efficiency Credit” to be an “Administrative Credit” pursuant to section 2.2.18 at

the time that the credit was issued. Neither the UPAP nor the correspondence exchanged between the consultant, PBC WUD, or Seacoast Utility define the term “System Efficiency Credit” or refer to, or classify it as an Administrative Credit. Moreover, even if the PBC WUD Director had intended to issue a credit under 2.2.18, he did not comply with the requirements of that provision to explain the basis for the credit in the account comments, as required by that section.

Additionally, the provision in the UPAP regarding “Administrative Credits” is found within the Customer Service Billing section of the UPAP. The System Efficiency Credit was not a credit against a customer’s monthly service charges based on usage in accordance with **CHAPTER 2 CUSTOMER SERVICE**, Section 2.2.6 **BILLING CYCLE**. Instead, the “System Efficiency Credit” was effectively a reduction in the upfront capacity reservation cost to Seacoast Utility, which is based on a future usage, not current or prior usage. Charges for capacity reservation are paid prior to service.

## BACKGROUND ANALYSIS

The term “System Efficiency Credit” was not defined in the UPAP and nothing in the UPAP suggests that the Administrative Credit permitted a “System Efficiency Credit” towards the capacity reservation for future use, especially where the BCC had already entered into an Agreement specifically setting forth the methodology for calculating the capacity fee charges to Seacoast Utility.

Although the PBC WUD Director asserts that the System Efficiency Credit was not an amendment to the Agreement, he wrote a letter to Seacoast Utility providing the System Efficiency Credit as a “one-time, limited System Efficiency Credit that may be structured as a reduction in the upfront costs payable by the Authority for Project Beach Ball’s reservation of 350,000 gallons per day of water system capacity.” In response, Seacoast Utility sent a letter dated October 10 wherein it enclosed payment of \$1,533,554 for the 400,000 gallons bulk water service and 100,000 gallons bulk wastewater service request “in accordance with the First Restated Interlocal Agreement” between the County and Seacoast. This shows that the credit was issued as part of transaction in which Seacoast Utility purchased capacity under the Agreement. The correspondence between PBC WUD and Seacoast Utility clearly shows that the credit provided directly related to the Agreement.

*It does not appear that the PBC WUD Director had the authority to issue the credit to Seacoast Utility under the UPAP. We do not believe that the PBC WUD Director had authority to issue such credit without seeking authority from the BCC to amend the Agreement between PBC and Seacoast Utilities. Additionally, we have concerns with the delegation of authority that the PBC WUD Director interprets as unlimited, especially where such authority would supplement, amend, or modify a written document approved by the BCC at a public meeting. This is a concern that transactions will occur without proper checks and balances; and thus, poses risk to the County.*

**OBJECTIVES, SCOPE, AND METHODOLOGY**

Our overall objectives of the audit were to:

- Determine whether controls were adequate related to the System Efficiency Credit and its calculation; and
- Assess the reliability, accuracy, and authorization of the System Efficiency Credit.

The scope of the audit included activities, transactions, and agreements that were relevant to the System Efficiency Credit.

The audit methodology included:

- Reviewing internal controls related to the audit subject;
- Interviewing appropriate personnel;
- Reviewing related requirements, policies, and processes,
- Reviewing reports, contracts, and agreements; and
- Performing recalculations of the transactions.

Pursuant to §112.3188(1), Florida Statutes (The Whistleblower Act), based on the nature of the information disclosed to the OIG, one or more individuals were recognized as a Whistleblower and the OIG subsequently initiated a Whistleblower audit.

This audit was conducted in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.



**FINDINGS AND RECOMMENDATIONS**

Allegation (1): The PBC WUD Director did not have authority to issue a credit to Seacoast Authority because a past similar credit required PBC Board of County Commissioners (BCC) approval.

Allegation (2): The calculation for the credit was flawed and inaccurately calculated.

**Finding (1): PBC WUD lacked proper approval and authorization to provide the System Efficiency Credit.**

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On April 4, 2017, the BCC approved and entered into the Agreement between the BCC and the Seacoast Utility relating to Seacoast Utility's purchase and sale of bulk potable water and wastewater service from the County. The April 4, 2017 Agreement states,

"31. Amendment and Modification. This Agreement may only be amended, modified, changed, supplemented, or discharged by an instrument in writing signed by the parties hereto.

32. Entirety of Agreement. County and [Seacoast Utility] Authority agree that this Agreement and any Exhibits hereto set forth the entire agreement between the parties, and that there are not promises or understandings other than those stated herein. None of the provisions, terms and conditions contained in this Agreement may be added to, modified, superseded or otherwise altered, except by written instrument executed by the parties."

On April 26, 2017, an outside consultant provided a recommended System Efficiency Credit of \$582,446. PBC WUD relied upon the outside consultant's calculations. The credit actually provided was based on an outside consultant's analysis and value for a System Efficiency Credit for operating cost savings due to avoided water line flushing expenses over the next four years.

On April 27, 2017, the PBC WUD Director issued a one-time System Efficiency Credit for \$582,446 to Seacoast Utility. This credit was structured as a reduction in the upfront costs payable by Seacoast Utility Authority for increased capacity.

The System Efficiency Credit issued essentially reduced the capacity reservation fee paid and approved in the Agreement by approximately 28%. As per the Agreement, the total cost for capacity reservation should have been \$2,089,000. The actual amount paid based on the System Efficiency Credit issued was \$1,506,554.

PBC WUD provided the System Efficiency Credit without seeking authority to amend the Agreement. Although the Agreement defines the UPAP, the Agreement does not provide that it can be amended, supplemented, or modified by the PBC WUD Director. Instead, the Agreement provides that amendments, supplements, and modifications must be

made by a written instrument signed by the parties to it. The Agreement was not amended, modified, or supplemented by a written instrument signed by BCC and the Seacoast Utility, as required by Section 31 of the Agreement.

Additionally, the PBC WUD had no written policies or procedures outlining the circumstances or process that must be followed when awarding a System Efficiency Credit for operating cost savings, and the UPAP does not specifically authorize the WUD Director to issue a System Efficiency Credit for \$582,446.

PBC WUD was not authorized to provide the System Efficiency Credit and the credit effectively amended the Agreement without approval or a written instrument executed in accordance with the Agreement. As a result, we are questioning the cost of the System Efficiency Credit in the amount of **\$582,446**.

#### **Recommendations:**

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- (1) PBC WUD seek appropriate approval and authorization for the System Efficiency Credit provided to Seacoast Utility Authority, in compliance with the Agreement.**
- (2) PBC WUD review and comply with contract terms, as well as, policies and procedures relating to System Efficiency Credits (or similar credits), when applicable.**

#### **Management Response:**

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- (1) After approval by the Seacoast Utility Authority Board of a First Amendment to the First Restated Interlocal Agreement for the Purchase and Sale of Bulk Potable Water and Wastewater Service, PBC WUD will seek the Board of County Commissioners' (BCC's) approval of the Amendment, which will include a new Section implementing the System Efficiency Credit. PBC WUD estimates that the Amendment will be brought to the BCC on June 19, 2018.**
  - (2) PBC WUD will review and comply with contract terms, as well as, all PBC WUD policies and procedures relating to credits.**
- 

Allegation (3): Any unrealized savings as a result of this credit would be a violation of PBC WUD bond covenants.

Allegation (4): The accounting treatment of the credit was not accurately presented in PBC WUD's accounting records.

### **Finding (2): Revenue and the System Efficiency Credit were not properly recorded in the PBC WUD's accounting records.**



Based on the Agreement, the total revenue recorded for the purchase of additional capacity should have been \$2,089,000, with \$1,520,000 for potable water (400,000 gallons at \$3.80 per gallon) and \$569,000 for wastewater (100,000 gallons at \$5.69 per gallon).

In October 2017, the Seacoast Utility Authority paid PBC WUD \$1,533,554,<sup>4</sup> the invoiced amount for additional capacity reservation fees net of the System Efficiency Credit of \$582,446. The net amount received was posted to guaranteed revenues and the System Efficiency Credit issued was not recorded in the accounting records. Therefore, the \$582,446 credit was not appropriately captured as part of the accounting transaction in accordance with generally accepted accounting principles.

The Financial Accounting Standards Board's (FASB) revenue recognition standard related to customer payments and incentives (FASB ASC Topic 605.50) provides that a revenue transaction should be recorded at the full amount of the revenue along with a reduction of revenue for the amount of the discount/credit/incentive. The transaction was not properly recorded in the accounting records. As a result, the Agreement revenue was understated and the System Efficiency Credit was not properly recorded in the accounting records. Additionally, if the accounting records are not resolved in the current FY then this may affect PBC WUD's bond covenant requirements.

#### **Recommendation:**

- (3) The accounting records should properly reflect both the total amount of revenue per the Agreement and the System Efficiency Credit provided.**

#### **Management Response:**

- (3) After approval by the Seacoast Utility Authority Board and the Board of County Commissioners of a First Amendment to the First Restated Interlocal Agreement for the Purchase and Sale of Bulk Potable Water and Wastewater Service, which contains language implementing the System Efficiency Credit, PBC WUD will properly adjust the accounting record.**

### **SUMMARY OF OTHER BENEFITS IDENTIFIED IN THE AUDIT**

Section 125.045(5)(a)3, Florida Statutes provides the definition for economic development incentives to include: "Fee-based or tax-based incentives, including, but not limited to, credits, refunds, exemptions, and property tax abatement or assessment reductions."

<sup>4</sup> This amount was calculated inaccurately and should have been \$2,089,000 less \$582,446 to equal \$1,506,554, assuming the credit was authorized and approved. In December 2017, PBC WUD issued a refund of \$27,000 to resolve the overpayment.

Based on our review of relevant documents and information provided by PBC WUD staff, it appears that the System Efficiency Credit was a fee reduction and may meet the definition of an economic credit/incentive.

Section 125.045(5)(a), Florida Statutes states that "...each county shall report to the Office of Economic and Demographic Research the economic development incentives in excess of \$25,000 given to any business during the county's previous fiscal year."

Since the System Efficiency Credit was recognized in October 2017 when the payment was received from Seacoast Utility, PBC WUD may be required to report the economic development incentive amount at the end of the FY 2018.

We suggest PBC WUD management review the inclusion of the System Efficiency Credit as an economic credit/incentive and consider reporting the credit to the State of Florida Office of Economic and Demographic Research at the end of the FY 2018.

## ATTACHMENTS

Attachment 1 – Palm Beach County Water Utility Department's Management Response, page 12

Attachment 2 – Whistleblower's Response, page 13 – 17

## ACKNOWLEDGEMENT

The Inspector General's audit staff would like to extend our appreciation to the PBC WUD management and staff for their assistance and support in the completion of this audit.

*This report is available on the OIG website at: <http://www.pbcgov.com/OIG>. Please address inquiries regarding this report to the Director of Audit by email at [inspector@pbcgov.org](mailto:inspector@pbcgov.org) or by telephone at (561) 233-2350.*

## ATTACHMENT 1 – PALM BEACH COUNTY WATER UTILITY DEPARTMENT'S MANAGEMENT RESPONSE



DATE: April 25, 2018

TO: Megan Gaillard, Director of Audit  
Office of Inspector General

FROM: Jim Stiles, Director *Jim Stiles*  
Palm Beach County Water Utilities Department

RE: Audit of System Efficiency Credit Response

Please find Palm Beach County Water Utilities Department (PBC WUD) responses to the Office of Inspector General findings and recommendations regarding the Audit of System Efficiency Credit. Although we do not fully concur with the findings, we concur with the recommendations of the Office of the Inspector General and will implement those recommendations as set forth below.

Finding (1): PBC WUD lacked proper approval and authorization to provide the System Efficiency Credit.

Recommendations:

- (1) PBC WUD seek appropriate approval and authorization for the System Efficiency Credit provided to Seacoast Utility Authority, in compliance with the Agreement.

**RESPONSE:** After approval by the Seacoast Utility Authority Board of a First Amendment to the First Restated Interlocal Agreement for the Purchase and Sale of Bulk Potable Water and Wastewater Service, PBC WUD will seek the Board of County Commissioners' (BCC's) approval of the Amendment, which will include a new Section implementing the System Efficiency Credit. PBC WUD estimates that the Amendment will be brought to the BCC on June 19, 2018.

- (2) PBC WUD review and comply with contract terms, as well as, policies and procedures relating to System Efficiency Credits (or similar credits), when applicable.

**RESPONSE:** PBC WUD will review and comply with contract terms, as well as, all PBC WUD policies and procedures relating to credits.

Finding (2): Revenue and the System Efficiency Credit were not properly recorded in the PBC WUD's account records.

Recommendation:

- (3) The accounting records should properly reflect both the total amount of revenue per the Agreement and the System Efficiency Credit provided.

**RESPONSE:** After approval by the Seacoast Utility Authority Board and the Board of County Commissioners of a First Amendment to the First Restated Interlocal Agreement for the Purchase and Sale of Bulk Potable Water and Wastewater Service, which contains language implementing the System Efficiency Credit, PBC WUD will properly adjust the accounting record.

Cc: Verdenia C. Baker, Palm Beach County Administrator  
Jon Van Arnam, Deputy County Administrator

## ATTACHMENT 2 – WHISTLEBLOWER'S RESPONSE

Megan Gaillard, Director of Audit  
Office of the Inspector General  
Palm Beach County  
PO Box 16568  
West Palm Beach, FL 33416-6568

April 23, 2018

Re: Palm Beach County Water Utility Department System Efficiency Credit

The Office of the Inspector General's audit of the Palm Beach County (PBC) Water Utilities Department's (WUD) System Efficiency Credit (Credit) is thorough and complete. This document provides an update on matters as of February 6, 2018.

On December 6, 2017, I met with WUD administration regarding the matter of the System Efficiency Credit. I discussed the problems with the System Efficiency Credit and the agreement between PBC and the Seacoast Utility Authority (Authority). The attending members included James Stiles (Director), Debra West (Assistant Director), Hassan Hadjimiry (Deputy Director), and Kenny Rampersad (Director Finance & Administration). James Stiles maintained that the Credit was approved by all relevant authorities and had received a systematic review. Hassan Hadjimiry shared the backup calculations for the project (Attachment 1).

However, Hassan Hadjimiry intentionally misrepresented the fact that the calculations that he provided to me on December 6, 2017 were in support of the Credit as the Department is on record as stating that the actual supporting document for the credit (Attachment 2) was prepared the Environmental Financial Group (EFG) acting as a financial consultant. I subsequently requested EFG's calculations that were used to develop the Credit after learning of Hassan Hadjimiry's intentional misrepresentation. After analyzing EFG's calculations, I determined that there are several issues with the methodology of the Credit.

First, the memorandum states that a high probability was present that the water sales from the project will match the capacity limit of the project. However, customer account records (Attachment 3) show that only 169,310 gallons per day of potable water was taken by the Authority over the months of February 2018 and March 2018 while the Authority has purchased 350,000 gallons of potable water capacity. EFG's assumption is clearly in error. Second, it was irresponsible for EFG to assume that any customer would consume the level of potable water equal to its capacity as purchased capacity is viewed as a not to exceed level. Due to the Authorities lower than forecasted consumption, WUD will fail to achieve the stated savings as forecasted by EFG in its report.



Craig Williams

PBCWUD System Efficiency Table

Attachment 1

Zone 5  
2016-2017

Months	Water Usage Flushing						Chlorine cost	Power cost	
	WQ Sampling Flushing	Flushing Cl2- Residual	Total Gallons	Water cost (\$1.6 /KG)	4100	Mecca			
Apr-16	1500	29,032,000	29,033,500	\$46,453.60	\$2,474.01	\$7,115.00			
May-16	1000	120,337,100	120,338,100	\$192,540.96	\$2,702.38	\$7,794.00			
June-16	1000	1,300,000	1,301,000	\$2,081.60	\$2,584.24	\$8,553.00			
July-16	1000	1,300,000	1,301,000	\$2,081.60	\$3,014.58	\$7,541.00			
August-16	1000	34,917,120	34,918,120	\$55,868.99	\$2,476.91	\$5,493.00			
September-16	1500	12,510,320	12,511,820	\$20,018.91	\$3,462.49	\$6,334.00			
October-16	1500	3,980,250	3,981,750	\$6,370.80	\$3,434.42	\$5,698.00			
November-16	1500	3,980,250	3,980,250	\$6,368.40	\$2,849.69	\$5,737.00			
December-16	1500	3,980,250	3,981,750	\$6,370.80	\$2,680.81	\$6,088.00			
January-17	1500	10,019,228	10,020,728	\$16,033.16	\$2,841.05	\$6,490.00			
February-17	1000	2,752,395	2,753,395	\$4,405.43	\$3,378.88	\$5,875.00			
March-17	1000	2,752,395	2,753,395	\$4,405.43	\$3,588.65	\$5,965.00			
<b>Total</b>	<b>13500</b>	<b>226861308</b>	<b>226874808</b>	<b>\$362,999.69</b>	<b>\$35,488.11</b>	<b>\$78,683.00</b>			
<b>Annual cost</b>				<b>\$505,254.80</b>					

System efficiency factor	25%
Annual saving	\$126,313.70
annual interest rate	4%
terms (years)	5
<b>Present Value</b>	<b>(\$562,326.15)</b>

## Attachment 2

**Environmental Financial Group**

San Francisco - Palm Beach

**MEMORANDUM**

Date: April 26, 2017

To: Jim Stiles, Palm Beach County Water Utilities  
Debra West, Palm Beach County Water Utilities  
Hassan Hadjimiry, Palm Beach County Water Utilities

From: Scott Harder

Re: Seacoast Utility Authority System Efficiency Credit

This memorandum sets forth the rationale and calculations for a recommended System Efficiency Credit that may be offered to the Seacoast Utility Authority (Authority) in accordance with the April 4, 2017 Bulk Service Agreement between Palm Beach County (County) and the Authority.

**System Efficiency Credit**

It has come to our attention that the Authority is seeking to purchase 350,000 gallons per day (gpd) of permanent potable water supply, treatment and transmission capacity and 70,000 gpd of wastewater collection and treatment capacity in accordance with the April 4, 2017 Bulk Service Agreement (the Agreement) between the parties. Bulk water sales generated through this purchase of capacity will be delivered to the Authority at the Park of Commerce point of delivery as defined in the Agreement. The subsequent water sales are expected to be low-peak and there is a high probability that water sales for planned industrial purposes will be close to the capacity limits for the foreseeable future.

The Park of Commerce point of connection is located at the extreme northern terminus of the Palm Beach County Water Utilities Department (PBCWUD) Zone 5 water transmission system. Only a few customers are now located in this part of the PBCWUD system, resulting in higher than average flushing requirements to maintain minimum pipeline chlorine residuals. PBCWUD forecasts of future connections in this area suggest that these higher than normal expenses are expected to continue over the next four years until additional development occurs. PBCWUD expects that limited, short-term system operating efficiencies due to avoided flushing expenses can be secured through the sale of capacity to the Authority at this time. In accordance with PBCWUD's cost of service ratemaking methods and policies, it is reasonable that such operating efficiencies be passed along in the form of a lump sum System Efficiency Credit.

TABLE 1 attached presents the detailed calculations for the System Efficiency Credit. The \$582,446 lump sum credit would be applied at the time of capacity purchase. This System Efficiency Credit is based on defined County operating cost savings due to avoided water line flushing expenses over the next four years until additional development occurs which dilutes the system benefits attributable to a single customer.



**TABLE 1**  
**SEACOAST UTILITY AUTHORITY - Park of Commerce Point of Delivery**  
**System Operating Efficiency Credit**

	2017	2018	2019	2020	2021	2022
	<i>Baseline</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<b>Zone 5 System Efficiency Credit</b>						
WTP X Unit Treatment Cost	\$1.69	\$1.73	\$1.78	\$1.82	\$1.87	\$1.91
Water Pipeline Flushing Volume, kGal/Yr	226,875					
Avoided Flushing Volume		100,000	75,000	50,000	25,000	-
Annual Treatment Cost for Flushed Water	\$383,419	\$173,225	\$133,167	\$90,997	\$46,636	\$0
Chlorine Costs	\$35,500	\$16,039	\$12,330	\$8,425	\$4,318	\$0
Power Cost (4100/Mecca)	\$114,200	\$52,884	\$41,671	\$29,187	\$15,332	\$0
<b>TOTAL SYSTEM EFFICIENCY BENEFITS, \$/Yr</b>		<b>\$242,148</b>	<b>\$187,168</b>	<b>\$128,610</b>	<b>\$66,286</b>	<b>\$0</b>
<b>NET PRESENT VALUE (3.5%)</b>		<b>\$582,446</b>				
<i>Baseline cost information from PBCWUD staff.</i>						
<i>Annual Cost Index</i>		<i>2.5%</i>	<i>2.5%</i>	<i>2.5%</i>	<i>2.5%</i>	<i>2.5%</i>
		<i>Gal</i>	<i>Gal</i>	<i>Gal</i>	<i>Gal</i>	<i>Gal</i>
<i>Purchased Water Purchased Capacity</i>		<i>350,000</i>	<i>350,000</i>	<i>350,000</i>	<i>350,000</i>	<i>350,000</i>
<i>Wastewater Purchased Capacity</i>		<i>70,000</i>	<i>70,000</i>	<i>70,000</i>	<i>70,000</i>	<i>70,000</i>

