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CITY AUDITOR'S OFFICE

TO: Mayor and Council Members  
THRU: Margaret Krym, City Auditor  
FROM: Oscar Claudio, Assistant City Auditor  
DATE: December 16, 2014  
SUBJECT: Audit of Utility Billing System

Attached you will find our report for the Audit of the Utility Billing System.

We would like to thank staff in Customer Billing Services for their cooperation and assistance during this audit.

We will be happy to respond to any questions or concerns you may have about the information contained in this document. You may contact me at 239-242-3382 or Margaret Krym at 239-242-3380.

C: John Szerlag, City Manager  
Dolores Menendez, City Attorney  
Rebecca van Deutekom, City Clerk  
Victoria Bateman, Financial Services Director  
Bill Boyd, Customer Billing Systems Manager  
Audit Committee



CITY AUDITOR'S OFFICE

# AUDIT OF UTILITY BILLING SYSTEM

December 16, 2014

## EXECUTIVE SUMMARY

The City Auditor's Office has conducted an audit of the Utility Billing System. This audit was carried over from the approved Fiscal Year (FY) 2013 Audit Plan and included in the FY 2014 Audit Plan. We performed the audit in accordance with the generally accepted government auditing standards.

Based on results of the completed audit, we identified four audit findings, and two reportable conditions, and provided recommendations and suggestions to address these issues. The audit did not include an examination of all functions and activities related to the utility billing process.

The following findings were observed during the audit:

- The applicable fire line irrigation rates approved by the City Council were incorrectly implemented according to mandated dates. This resulted in the imposition of incorrect rates for several years. The incorrect fire line irrigation rates imposed on several customers resulted in under charges of \$7,347.74 and over charges of \$4,921.62.
- There was insufficient management oversight over the process to write off delinquent utility accounts. As of September 30, 2013, management has not written off delinquent utility accounts with balances over 180 days.
- Utility accounts with balances owing over 180 days have not been referred to a collection agency for collection since December 2012. As of September 30, 2013, utility accounts with balances owing over 180 days totaled \$3,342,310.
- The current Customer Billing Service's (CBS) policies and procedures manual has not been revised and updated since October 2010. It contained procedures that still relate to the HTE billing system even though CBS has been using the JDE utility billing system since 2010. In addition, the policies and procedures are not consistent with Chapter 19 of the City Code of Ordinance and recent Council Resolution, which govern the water and sewer utilities regulations.
- The monthly billing statements for some customers reflected zero consumption, but nonetheless, were billed for utility usage for that billing period. In some cases, a customers' billing statement showed 800 gallons consumption but was billed for 1,200 gallons; and another customer for 24,000 gallons consumption but was billed for 44,000 gallons.
- The water, irrigation, and wastewater rates schedule printed on the back of monthly billing statements did not reflect appropriate rates for the intended fiscal year.

In general, there are sufficient controls to ensure utility bills are processed accurately and timely. Management had implemented effective procedures that provided reasonable assurance regarding the achievement of its objectives relating to the uploading and downloading of meter reads by cycles and routes leading to the monthly billing of utility customers. However, opportunities for improvement exist in utility rates implementation and supervisory review controls.

We discussed all findings with management and their responses are included in the final report. Our conclusions were based on the various audit procedures performed during the audit process.

## **BACKGROUND**

The City provides public utilities of water, wastewater, and irrigation for approximately 54,000 residential and commercial customers. According to the Comprehensive Annual Financial Statements for FY 2013, charges for utility services were estimated at \$76,690,000. Customer Billing Service (CBS) is a Division of Financial Services Department and is responsible for providing service to utility customers by issuing bills, resolving account discrepancies, reading meters, creating work orders, initiating and terminating services, and conducting collection activities for current accounts.

In 2010, the City transitioned from HTE billing software to JDE utility billing system. Equinox software system with hand-held computer technology is used to obtain automated meter readings. Monthly billings are coordinated into 33 cycles throughout the City. For each billing cycle, automatic meter reading data is downloaded from the Equinox software and uploaded into the JDE utility billing system.

## **OBJECTIVES**

The objectives of the audit were to:

- 1) Determine whether consumption of water and wastewater was properly and accurately billed to residential and commercial customers;
- 2) Determine if the applicable rates were applied, proper charges were imposed, calculations were done correctly and payments were recorded in customers' accounts;
- 3) Determine if collection efforts on delinquent accounts were adequate to minimize loss in revenue; and
- 4) Determine whether the internal control system in place provided management with reasonable assurance that the policies and procedures are effective and being properly observed by the Customer Billing Service personnel.

## **SCOPE AND METHODOLOGY**

The audit covered utility billing transactions during FY 2012, 2013 and portion of FY 2014. In addition, the audit reviewed CBS policies and procedures manual; and applicable City Ordinances and Council Resolutions. The CBS policies and procedures provided an overview of the required administrative controls in place related to the Division's operations and were utilized to determine compliance with applicable regulatory requirements.

The audit performed other procedures such as:

- 1) Tested a selected sample of residential and commercial customer monthly billing account statements during FY 2012, 2013 and 2014;
- 2) Reviewed a sample of reports of active and inactive delinquent customer accounts;
- 3) Reviewed delinquent accounts report forwarded to the previous collection agency;
- 4) Judgmentally selected a sample of customer accounts to analyze the propriety and accuracy of billing for measured consumption;
- 5) Tested a selected sample of customer accounts to analyze the applicable utility rates, imposition of proper charges and accuracy of calculation for residential and commercial customers;

- 6) Tested certain procedures and systems for uploading meter reads by cycle and routes;
- 7) Assessed and documented selected internal control systems; and
- 8) Reviewed utility sales revenue and corresponding revenue reports for FY 2013

Sample testing was used to improve the overall efficiency of the audit. Original records were reviewed and copies were used as evidence and verified through physical examinations.

Lastly, the Division's staff and management and other employees that have affiliation or working knowledge of the Division's operations were inquired in order to develop an understanding of relevant internal control structures, obtain sufficient information of operations and to verify the validity of the gathered data and documents.

This audit was neither designed nor intended to be a detailed study of every relevant system, procedure, or transaction. Accordingly, the opportunities for improvement presented in this report may not be all-inclusive of areas where improvement may be needed. Although we exercised due professional care in the performance of this audit, this should not be construed to mean that unreported noncompliance or irregularities do not exist. The deterrence of fraud is the responsibility of management.

## **STATEMENT OF AUDITING STANDARDS**

We conducted this performance audit 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. Also, the audit includes assessment of applicable internal controls and compliance with requirements of laws and regulations when necessary to satisfy the audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

## RESULTS OF AUDIT

### 1. The applicable fire line irrigation rates approved by the City Council were incorrectly implemented according to mandated dates. This process resulted in the imposition of incorrect rates for several years.

The audit identified 13 customers with fire line irrigation connected to City water had been billed with incorrect rates for several years. Applicable fire line rates approved by the City Council were incorrectly implemented.

City Ordinance 80-00 adopted on August 28, 2000, established the following fire line irrigation rate schedule:

<u>Fire Line Size (inches)</u>	<u>Annual Charge</u>	<u>Monthly Equivalent</u>
1	\$ 50.00	\$ 4.17
2	\$100.00	\$ 8.33
3	\$200.00	\$16.67
4	\$300.00	\$25.00
5	\$400.00	\$33.33
6	\$500.00	\$41.67
7	\$600.00	\$50.00

City Council Resolution 35-13 adopted on September 9, 2013, established the following fire line irrigation rate schedule:

<u>Fire Line Size (inches)</u>	<u>Annual Charge</u>	<u>Monthly Equivalent</u>
1	\$ 50.00	\$ 4.17
2	\$100.00	\$ 8.33
4	\$200.00	\$16.67
6	\$300.00	\$25.00
8	\$400.00	\$33.33
10	\$500.00	\$41.67
12	\$600.00	\$50.00

CBS had billed these 13 customers with incorrect fire line irrigation rates as far back as October 2000, because the Council approved rates were not properly implemented.

Examples:

- a) Seven customers with fire line size of 4" were charged with different monthly rates ranging from \$12.84 up to \$52.49 in October 2000 through July 2014. The effective monthly rate from October 2000 through September 2013 was \$25.00;
- b) The same seven customers were charged with rates ranging from \$19.80 up to \$50.00 in September 2013 through July 2014 wherein the monthly effective rate was \$16.67 during these periods.

The incorrect fire line irrigation rates imposed on these 13 customers resulted in under charges of \$7,347.74 and over charges of \$4,921.62. If CBS will not be able to collect the under charges and will have to refund the over charges, the City may be in the position of losing more than \$12,000.

**Recommendation #1:** We recommend CBS establish effective control mechanisms that will ensure appropriate rates are implemented in order to avoid this condition from occurring in the future. CBS personnel should be trained about the new required procedures. If warranted, CBS should back-bill the customers that were under charged and refund the customers that were over charged from the period allowable by the City Ordinance.

**Management Response:**

*CBS staff have updated rates in the utility billing software in accordance with applicable rate resolutions or ordinances. When rates are updated, to ensure sufficient control of the input of the applicable rates, one CBS staff member will input the rates and a member of the CBS leadership will verify the rates input. There were 13 commercial accounts billed for irrigation water fire line service. A reconciliation of these accounts to backbill or refund will be completed.*

**2. There was insufficient management oversight over the collection process to write off delinquent utility accounts.**

The audit disclosed that management has not written off delinquent utility account balances over 180 days, which amounted to \$3,342,310 as of September 30, 2013. The last utility billing accounts write off was approved by the City Council on April 20, 2010. In accounting, write off means the recognition of the reduced or zero value of an asset. Conversely, it is to charge an asset amount to expense or loss in order to reduce the value of an asset.

This condition exists because management did not adequately monitor the collection process to write off delinquent utility billing accounts for several years. Additionally, accounts receivable aging reports were not consistently used and reviewed to determine the quantity of delinquent accounts available for write off.

Inadequate oversight increases the risk of mismanaging the delinquent accounts and increases the possibility that non-qualifying accounts will be written off. In addition, management cannot provide reasonable assurance that collectability efforts have been exhausted before these accounts are written off due to lack of sufficient management oversight.

Financial Management Policy OM#6 states that the “City will write off all customer accounts deemed uncollectible. Further, it states that uncollectible is defined as any account that is greater than or equal to 180 days from the date of invoice.”

**Recommendation #2:** We recommend CBS expand the current procedures to establish a more comprehensive level of internal controls covering the processing, reviewing and approval of delinquent balances for write off. In addition, CBS should generate a monthly delinquency report that can be used to inform management on the status of utility accounts collection. Proper oversight controls and procedures provide management with reasonable assurance that functions are performed accordingly.

<p><b>Management Response:</b></p> <p><i>CBS staff will begin providing monthly delinquency/aging reports which will be reviewed and approved by CBS leadership. These monthly reports will be available to Financial Services management, as well as the Utilities department head.</i></p> <p><i>CBS will work with IT to facilitate a monthly update of closed tenant accounts within the utility billing software, (JDE), to effectively change the status from delinquent to write- off.</i></p>
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**3. Utility accounts with balances owing over 180 days have not been referred to a collection agency for collection since 2012.**

As of September 30, 2013, the utility accounts with balances over 180 days totaled \$3,342,310 and none of these accounts had been referred to a collection agency for collection since December 2012. Management referred about 2,500 overdue accounts that amounted to \$1,009,865 from October 2009 through late 2012. The majority of these accounts were placed in 2009. However, only 212 of the 2,500 accounts balances were collected which was equivalent to \$54,897. The audit tested 75 from the remaining uncollected balances to determine if any collections had been made and it was revealed that there has been no other collection made on these overdue accounts since then.

Best practices require commercial, private and government establishments to collect outstanding debt balances in order to meet financial performance and maintain effective operational success. Accounts receivable is among the largest and most liquid assets on the books of most business organizations. A properly managed accounts receivable portfolio can expedite cash flow and support the business organizations' cash requirements. The ultimate goal of accounts receivable collection is to increase working capital.

Management has not established effective means of collecting delinquent accounts with outstanding balances. Also, there is a lack of monitoring and periodic review of delinquent account balances which resulted in numerous utility accounts with substantial overdue balances. Lastly, there is currently no established periodic schedule on when utility accounts with outstanding balances owing over 180 days are to be referred to a collection agency for collection.

A risk currently exists that the City may lose a substantial amount of outstanding or uncollected account balances if appropriate and effective actions are not immediately under taken.

**Recommendation #3:** We recommend management evaluate the reliability of the processes and procedures used in collecting overdue account balances. Management should establish effective means of collecting delinquent and overdue account balances and conduct periodic review of these accounts to ensure compliance with established procedures. Lastly, it should implement a periodic schedule on when to refer those accounts with outstanding balances over 180 days or more to a collection agency so that the collection process can be initiated in a timely manner.

***Management Response:***

*CBS staff are collaborating with Procurement to evaluate and procure collection vendor services. Once a collection vendor is determined, processes for referring accounts to the collection vendor will be determined. Then, on a monthly basis a report of delinquent accounts being serviced by the collection vendor will be provided to Financial Services management, as well as a copy to the Utilities Director.*

**4. The CBS current policies and procedures manual needs to be revised and updated in order to be consistent with the City Ordinance Chapter 19 and JDE utility billing system.**

The current policies and procedures manual has not been revised and updated since October 2007. It generally contained procedures that relate to the previous HTE billing software even though CBS is already using the JDE utility billing system since 2010. In addition, several policies contained in the current manual are not consistent with the City Ordinance Chapter 19 and recent Council Resolution, which governs the water and sewer regulations.

Management is solely responsible for the implementation and design of the organization's internal control systems. Those responsibilities include identifying objectives, updating the policies and procedures and developing new applicable controls when necessary. Policies and procedures are critical internal control components because they define management's objectives and intentions.

The enforceability of inaccurate and outdated policies and procedures will cause confusion among personnel as to which correct procedures to follow; increase risk of attaining erroneous results; and difficulty to focus resources to correct deficiencies.

**Recommendation #4:** We recommend CBS revise and update its current policies and procedures manual in order to strengthen CBS internal control systems and be consistent with the JDE utility billing system, City Code Ordinance Chapter 19 and Council Resolution. A strong and well designed system of internal controls can better protect assets; improve effectiveness and efficiency of operations; reliability of financial reporting; and compliance with applicable laws and regulations.

***Management Response:***

*The CBS policies and procedures manual will be updated to incorporate changes necessitated by JDE utility billing software, Code of Ordinances Chapter 19, and Council Resolution. The CBS policies and procedures manual will be maintained and available electronically, with a master hardcopy retained with CBS management.*

**REPORTABLE CONDITIONS<sup>1</sup>**

**1. The monthly billing statements for some customers reflected incorrect utility consumption usage during certain billing periods.**

The audit disclosed that monthly billing statements for some customers reflected zero consumption, but nonetheless, were billed for utility usage for that billing period. In some cases, a customers' billing statement showed 800 gallons consumption but was billed for 1,200 gallons and another customer for 24,000 gallons consumption but was billed for 44,000 gallons.

The incorrect consumption usage reflected in the customers' billing statements was due to transmission errors from JDE billing software to the printing vendor. This transmission of

<sup>1</sup> Matters coming to the Auditor's attention relating to significant deficiencies in the design or operation of internal control that could adversely affect the organization's ability to fulfill future obligations or satisfaction of liabilities.

information includes data files from the most recent meter reading. However, the entire month's reading is the basis for calculating utility consumption charges. For example, a customer's monthly total consumption was actually 1,200 gallons but the billing software picked-up only the most recent meter reading of 800 gallons and did not include the other 400 gallons when the file was transmitted to the printing vendor. As a result, the customers' billing statement showed only 800 gallons consumption but was correctly charged 1,200 gallons. Even though the consumption was incorrectly printed in the billing statement, the customer was billed correctly for the appropriate utility usage because JDE billing software based the calculation on the correct consumption.

When affected utility customers become aware of this erroneous practice, they may complain or protest to proper authority and may eventually distrust or lose confidence in the City's utility billing system.

**Suggestion:** We suggest CBS develop procedures to protect and ensure the correctness of data files from the JDE billing system before being transmitted to the printing vendor. Supervisory review should be performed to ensure the correctness and reliability of transmitted data files. Also, supervisors should ensure that the developed procedures are being followed and operating accordingly.

***Management Response:***

*The correct amount of consumption, as measured by multiple meters within a billing period, was, and is, billed correctly. The issue of each meter not being included with the customer's bill was corrected 9/2014.*

**2. The water, irrigation, and wastewater rates schedule printed on the back of the monthly billing statement does not reflect appropriate rates for the intended fiscal year.**

The audit disclosed that the schedule of utility rates printed on the back of monthly billing statements for FY 2014 did not reflect the appropriate rates intended for this fiscal year. The utility rates printed on the billing statements for FY 2014 were effective October 1, 2012, which was applicable for FY 2013.

**Suggestion:** We suggest management revise the utility rates schedule printed on the back of monthly billing statements to reflect the appropriate utility rates intended for the particular fiscal year.

***Management Response:***

*The rate schedule is accurate on the printed bills. The rate schedule on the e-bills needs updated. The e-bill vendor is in the process of updating the bill backer to reflect the current rates.*