



Office of the City Auditor

*Committed to increasing government efficiency, effectiveness,
accountability and transparency*

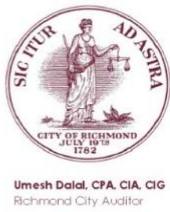
Department of Public Utilities Billing and Collection Process Report#: 2018-04



Issue Date: November 14, 2017

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Richmond City Council

The Voice of the People

Richmond, Virginia

Office of the City Auditor

Executive Summary

November 14, 2017

Ms. Selena Cuffee-Glenn, Chief Administrative Officer

Subject: Billing and Collections Process

The City Auditor's Office has completed an audit of the Department of Public Utilities (DPU) Billing and Collection process. The audit was conducted in accordance with the generally accepted government auditing standards promulgated by the Federal General Accounting Office.

During FY16, DPU collected over \$281 million in revenues as follows:

<i>Utility</i>	<i>Revenues</i>
<i>Gas</i>	\$126,024,076
<i>Water</i>	\$65,426,330
<i>Wastewater</i>	\$79,914,491
<i>Storm water</i>	\$10,311,508

Source: FY16 CAFR

Salient Findings:

- **Process Improvements**

Effective September 2016, all delinquent accounts held by the collection agency were transferred to a new collection firm, which is a local collection attorney. Under the former agency contract, the City paid between an 18 to 21 percent fee on monies collected. Under the new contract, the collection agency does not charge a fee to the City. Instead, the burden of collection is passed on to the delinquent customers.

- **Service Order Exceptions**

The auditors analyzed the service orders issued during FY16 from meter reading exceptions to determine the timeliness of inspecting. On average, it took 79 days to complete service orders generated by exceptions. Management indicated there are many challenges recruiting, training and retaining Field Operations staff.

A lack of a timely and effective process to address potential issues could cause water leaks to go undetected for long periods of time.

- **Shut Off Notices**

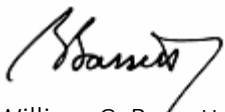
During FY16, Field Operations received 41,000 shutoff notices with only 7,000 service orders completed, which is 17% of the total workload. As stated above, Management is facing challenges with recruiting, training and retaining Field Operations staff.

- **Cash Policy Compliance**

The auditors reviewed funds collected and deposited during a three-month period to determine compliance with the City's Cash Policy. On average, it took approximately six days from check receipt in the field to deposit. This inefficiency is due in part to a non-value added step in cash deposit procedure.

The City Auditor's Office appreciates the cooperation of the Department of Public Utilities representatives that provided assistance during this audit. The responses to the recommendations made in this report are attached. Please contact me if you have any questions or comments.

Sincerely,



William C. Barrett, III, MFAcc, CPA, CFF, ABV
Interim City Auditor

cc: The Richmond City Audit Committee
The Richmond City Council
Mr. Robert Steidel, DCAO Operations
Ms. Rosemary Green, Interim Director of Public Utilities

Comprehensive List of Recommendations

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BACKGROUND

The City Auditor's Office has completed an audit of the Department of Public Utilities (DPU) Billing and Collection process. DPU is responsible for delivering some of the City's most essential services to more than 500,000 residential and commercial customers in Richmond and surrounding regions. DPU operates five utilities:

- natural gas
- water
- wastewater
- storm water
- electric street lighting

During FY16, DPU collected over \$281 million in revenues as follows:

<i>Utility</i>	Revenues
<i>Gas</i>	\$126,024,076
<i>Water</i>	\$65,426,330
<i>Wastewater</i>	\$79,914,491
<i>Storm water</i>	\$10,311,508

Source: FY16 CAFR

Billing and Collection Process

DPU staff are responsible for setting up customer accounts, connecting and disconnecting utility services, reading meters, billing and collecting utility accounts, and addressing customer concerns.

This process is depicted below:

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Meter Reading

- Meter reading vehicles drive around the City to read water and gas meters wirelessly.
- Data is uploaded into the Customer Information System.



Billing

- Bills are generated based on the automated readings.
- If the system identifies anomalies, they are validated by the staff.
- Bills are printed and mailed by a third party vendor.



Collections

- A bill not paid by the due date becomes delinquent and a past due notice is generated.
- If the bill remains unpaid, a shutoff notice is sent to the customer.
- If a service remains shutoff for more than 30 days, the delinquent account is sent to the collection agency.

Auditor Prepared

E-Billing

DPU offers e-billing to its customers. Customers who are enrolled in this program receive their bills electronically and an email reminder when their bill is due. Currently, there are approximately 21,000 e-billing accounts (12%) out of 180,000 accounts. Customers can enroll in the program by visiting DPU's website.

FINDINGS & RECOMMENDATIONS

Use of Collection Agencies

During FY16, DPU used an outside agency to collect delinquent accounts. Based on the terms of the contract, the City paid this agency incentive based commission fees, which ranged from 18% to 21%. The collected amount and the fees paid in FY16 were as follows:

Delinquent Collections	Fees paid by the City
\$1,138,305	\$184,777

Source: CIS & RAPIDS

Effective September 2016, all delinquent accounts held by the collection agency were transferred to a new collection firm, which is a local collection attorney. This firm became the sole collection agency used by DPU. Under the new contract, the collection agency does not charge a fee to the City. Instead, the burden of collection is passed on to the delinquent customers.

The auditors reviewed 35 accounts to ensure payments collected by the collection agency were properly posted to the appropriate customers' accounts. All payments tested were properly posted to the applicable accounts. In addition, based on the comparison of invoiced collections and payments, the auditors concluded that the general ledger balance correctly reflected recoveries from the collection agency.

Billings

Gas and water meters are read electronically by staff who drive around the City on established routes. DPU uploads the information obtained into their Customer Information System (CIS). During the automatic meter readings, the system identifies any anomalies (exceptions) that might have occurred. These exceptions are based on programed algorithms and are as follows:

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- *High Readings* – consumption reading is greater than average.
- *Low Readings* – consumption reading is lower than average.
- *Idle Readings* – an account that has been turned off shows consumption.
- *Negative Readings* – active account with reading lower than the previous.
- *Zero Readings* – active meter has no usage.

During FY16, CIS generated approximately 109,000 exceptions from 2,249,735 meter readings.

Below is a breakdown of these exceptions:

<i>Exception Type</i>	<i>Frequency</i>
<i>High</i>	30,438
<i>Low</i>	27,628
<i>Idle</i>	2,771
<i>Negative</i>	15,658
<i>Zero</i>	32,727

Source: CIS

DPU staff review these exceptions to determine their accuracy and if any further investigation is needed. If an investigation is needed, DPU generates a service order to send an inspector to the location to investigate further. Until the property is inspected, DPU staff submit an invoice based on either an estimated usage or the actual reading. The 109,000 exceptions generated approximately 17,000 service orders.

The auditors reviewed a sample of 75 exceptions to determine whether DPU staff addressed them timely and properly and found no discrepancies. In addition, the auditors analyzed the service orders issued during FY16 to determine the timeliness of inspecting the properties with potential exceptions. Auditors observed that on average, it took 79 days to complete service orders

generated by exceptions. Management indicated there are many challenges recruiting and retaining Field Operations staff. Some of the challenges include:

- a high vacancy rate;
- over one-third of the gas and water service technicians have less than three years of experience;
- a lengthy training process to ensure the gas and water technicians become proficient; and
- a lengthy recruiting process.

A lack of a timely and effective process to address potential issues could cause water leaks to go undetected for long periods of time. Not addressing exceptions could also cause frustration amongst customers.

Recommendation:

1. **The DPU Director needs to develop and implement a staffing plan to decrease the number of days taken to complete service orders issued by the exception process.**

Shutoffs

Accounts that are not paid by the due date are issued a delinquent notice and must be paid by the current due date. If customers do not pay within that time period or make payment arrangements, DPU staff issue a shutoff notice. If customers do not respond or make payment arrangements, DPU staff issue a notice to shut off their service and the technicians are deployed to the field to disconnect service.

DPU categorizes their shutoffs into two categories:

- Batch (DELQ) – these are automatically generated by CIS.
- Manual (DEQM) – these are manually generated by DPU staff when accounts are:
 - greater than \$500, and
 - 60 to 90 days old.

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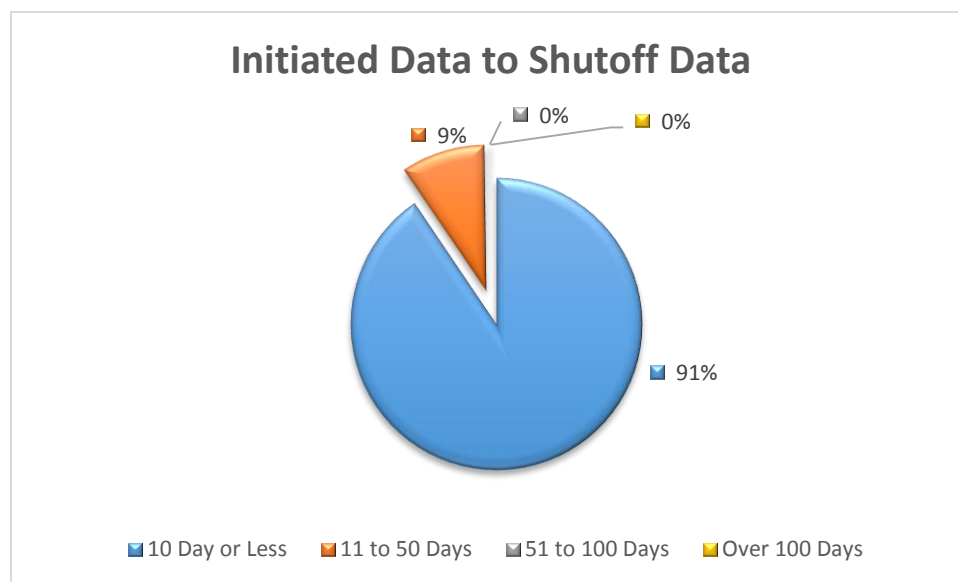
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During FY16, Field Operations received 41,000 shutoff notices. Once a shutoff notice is received the workload is distributed to the technicians. A service order is generated to disconnect the utilities for the accounts assigned. The remaining unassigned accounts are cancelled and resubmitted. During the audit scope, the technicians were only able to work 7,000, which is 17% of the total workload. According to management, technicians cannot process all shutoff notices due to staff shortage. As mentioned above, field operations have been short staffed for several years and the recruiting process is lengthy. On average it takes one to two years to fully train a technician on field operations. Management also indicated that resources are allocated to other areas during bad weather or other emergency events.

As mentioned above, technicians processed approximately 7,000 service orders and completed 90% of those accounts within 10 business days or less. The chart below depicts the shutoff timelines from initiation to shutoff:



Auditor Prepared

Subsequent to the audit scope, management indicated that they have improved the shutoff process. This means that service orders are now processed more timely. In order to validate

management's assertion, the auditors analyzed the closed DEQM and DELQ service order data from April 2017 to August 2017. The analysis indicated that 92% of the service orders were processed within 10 business days. Untimely shutoffs could result in delinquent customers continuing to receive services. This would result on a loss of revenue for the City.

Recommendation:

2. The DPU Director needs to develop and implement a plan to ensure shutoffs are worked timely.

Deposits of Funds Received During Field Collections

According to DPU Policy, technicians can accept payments (checks or money orders) in the field when customers wish to avoid service disconnection. The technicians are required to submit all funds collected in the field at the end of their shift to the designated DPU staff.

The process to deposit funds received in the field is as follows:

- Technicians submit payments to the designated staff at the Operations Center.
- The designated staff at the Operations Center prepares a payment log and submits to the Revenue Recovery Unit on East Broad Street.
- Revenue Recovery Unit submits the funds for deposit at City Hall.

According to the City's Cash Policy, cash receipts must be deposited as follows:

- \$500 or more must be deposited within 24 hours.
- All cash receipts, regardless of amount, must be deposited by 4:30 pm every Friday.

The auditors reviewed funds collected and deposited during a three-month period to determine compliance with the City's Cash Policy. The sample included 161 deposits totaling \$95,722. The auditors concluded that 58% of deposits tested did not comply with the City's Cash Policy. On

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average, it took approximately six days from check receipt in the field to deposit. The process and the average time of deposits are depicted below:



The auditors observed that the timeline to deposit the funds increased by involving the Revenue Unit in the process. The Unit's participation in the process adds a non-value step that increased the length it took to deposit funds. Submitting funds directly to City Hall from the Operations Center would reduce the deposit timeframe and allow the Unit to use their resources more efficiently. The timeline above also included the time it took Finance to process the funds. In order to avoid long lines during the busy season, DPU staff left deposits to be processed at the cashiers' convenience. This also extended the deposit timeline.

Untimely deposits increase the likelihood of theft. This also means that the City loses the opportunity to earn interest on these funds.

Recommendation:

3. The DPU Director needs to implement a process that ensures adherence to the City's Cash Policy.

Appendix A: Objectives, Scope, & Methodology

The audit was conducted in accordance with the Generally Accepted Government Auditing Standards promulgated by the Comptroller General of the United States. Those Standards require that the auditors plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for their findings and conclusions based on the audit objectives. The auditors believe that the evidence obtained provides a reasonable basis for their findings and conclusions based on the audit objectives.

SCOPE

Department of Public Utilities billings and collections for the period of July 1, 2015 through June 30, 2016.

OBJECTIVES AND METHODOLOGY

The objectives of this audit were to evaluate the operating effectiveness and efficiency of the Department of Public Utilities' (DPU) Billing and Collection process. Also, determine the existence and effectiveness of internal controls and to verify compliance with laws, regulations, policies and procedures.

Auditors performed the following procedures to complete this audit:

- Interviewed management and staff;
- Reviewed and evaluated relevant policies and procedures and tested for compliance;
- Conducted a walkthrough of the billing and collection processes;

- Participated in ride along's with technicians for the shutoff process;
- Obtained access to DPU's billing and collection system; and
- Performed other tests, as deemed necessary.

MANAGEMENT RESPONSIBILITY

City management is responsible for ensuring resources are managed properly and used in compliance with laws and regulations; programs are achieving their objectives; and services are being provided efficiently, effectively, and economically.

Overall the audit found that the billing and collection process is effective in collecting, managing, and writing-off delinquent accounts. While the billing and collections process is effective, opportunities exist to increase the efficiency of the Division's controls and operations.

MANAGEMENT RESPONSE FORM

2018-04 DPU - Billing and Collection Process

#	RECOMMENDATION	CONCUR Y/N	ACTION STEPS
1	The DPU Director needs to develop and implement a staffing plan to decrease the number of days taken to complete service orders issued by the exception process.	Y	DPU included funding in its FY18 and FY19 biennial budget to address staffing challenges in its Customer Service Division Field Operations. Consequently, DPU staff is developing business requirements to obtain a sustainable resource which will focus on completing service orders initiated during the meter reading exceptions process and shut-off orders issued for delinquent collections. 1. Complete business requirements. 2. Obtain resource.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Operations Manager, Field Operations		1. 12/31/2017 2. 7/1/2018
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
	NA		Service orders will be sent to the acquired resource. The resource will schedule and complete the service orders. Processes will be defined and implemented to monitor the completion of the service orders per the business requirements defined by DPU staff.
#	RECOMMENDATION	CONCUR Y/N	ACTION STEPS
2	The DPU Director needs to develop and implement a plan to ensure shutoffs are worked timely.	Y	See Action Steps for Audit Recommendation #1 above. DPU included completion of shut-off orders issued for delinquent collections in its business requirements for obtaining a sustainable resource. 1. Complete business requirements. 2. Obtain resource.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Program Manager, Revenue Recovery and Operations Manager, Field Operations		1. 12/31/2017 2. 7/1/2018
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
	NA		See Implementation details for Audit Recommendation #1 above.
#	RECOMMENDATION	CONCUR Y/N	ACTION STEPS
3	The DPU Director needs to implement a process that ensures adherence to the City's Cash Policy.	Y	DPU is evaluating the feasibility of implementing a Wells Fargo virtual lockbox solution which would enable same day deposit of checks collected in the field during delinquent collections activity. In the meantime, DPU is eliminating the step of sending customer checks received in the field through DPU Revenue Recovery, and it will send the checks directly from DPU Field Operations to COR Cashiers for processing and deposit.
	TITLE OF RESPONSIBLE PERSON		TARGET DATE
	Program Manager, Revenue Recovery		Meeting to be scheduled with Wells Fargo November 2017.
	IF IN PROGRESS, EXPLAIN ANY DELAYS		IF IMPLEMENTED, DETAILS OF IMPLEMENTATION
	NA		Implementation details will be determined from meeting with Wells Fargo to be scheduled November 2017.