

Audit of Orange County Utilities Water Meter Installation Revenue

**Report by the
Office of County Comptroller**

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TABLE OF CONTENTS

Transmittal Letter	1
Executive Summary	2
Action Plan.....	4
Introduction	6
Background	7
Scope, Objectives, and Methodology	8
Overall Evaluation	9
Recommendations for Improvement.....	10
1. Meter Location Records Should Be Monitored and Updated to Resolve Location Discrepancies between Software Data Applications	11

December 14, 2016

Teresa Jacobs, County Mayor
And
Board of County Commissioners

We have conducted an audit of the Orange County Utilities Department. The scope of the audit was limited to a review of controls over water meter installation revenue and water meter inventories. The period audited was October 1, 2014 through September 30, 2015. In addition, controls and procedures through the completion of fieldwork in September 2016 were considered.

We conducted this 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. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Responses to our Recommendations for Improvement were received from the Director of the Utilities Department and are incorporated herein.

We appreciate the cooperation of the personnel of the Orange County Utilities Department during the course of the audit.

Martha O. Haynie, CPA
County Comptroller

c: Ajit Lalchandani, County Administrator
Raymond E. Hanson, P.E., Director, Utilities Department
Tim Armstrong, Assistant Director, Utilities Department

EXECUTIVE SUMMARY

Executive Summary

The Board of County Commissioners establishes rates designed to cover the operating and maintenance costs, debt service expense, and other requirements of the water and wastewater system. County regulations require that meters and meter installations charges be paid prior to the issuance of the first building permit in a project to be served by the County's water system.

In the 2015 budget fiscal year, a total of 13,835 meters of various size and purpose were purchased by the Orange County Utilities Department (Utilities) to address the needs of new growth and meter replacement programs. Revenues earned from new water meter installations totaled approximately \$1.1 million for the fiscal year ended September 30, 2015

The scope of the audit was limited to a review of controls over water meter installation revenue and water meter inventories. The audit period was from October 1, 2014 to September 30, 2015. In addition, controls and procedures through the completion of fieldwork in September 2016 were considered. The objective of the audit was to determine whether controls over water meter inventories and water meter installation revenue were adequate.

Based on the results of our testing, controls over water meter installation revenue and water meter inventories were adequate. An opportunity for improvement is described below.

During our testing, we were able to ascertain the location status of all but 13 meters recorded as in-stock. Although these meters were reported as "in-stock", they could not be located by Utilities personnel during our review. Another 15 meters were recorded by Utilities personnel in an inventory database as "Missing Water Meters". Although the unaccounted for meters represent a very small percentage of the meters purchased, our detailed review noted that while removal dates were recorded, disposal records for meters were not updated with the final disposition of the meter.

A Recommendation for Improvement was developed and discussed with the Department. The Department concurred with our recommendation and steps to implement the recommendation are underway. The response to the Recommendation for Improvement is included herein.

ACTION PLAN

**ORANGE COUNTY UTILITIES WATER METER INSTALLATION REVENUE REVIEW
ACTION PLAN**

NO.	RECOMMENDATIONS	MANAGEMENT RESPONSE			IMPLEMENTATION STATUS	
		CONCUR	PARTIALLY CONCUR	DO NOT CONCUR	UNDERWAY	PLANNED
1.	We Recommend Utilities continues to identify and resolve discrepancies in recorded locations between its data systems. Additionally, the reasons for and method of a meter's disposal upon being removed from service should be recorded (e.g., removed due to age, malfunction, tampered with, stolen, returned under warranty, or scrapped).	✓			✓	

INTRODUCTION

**Background**

The Board of County Commissioners establishes rates designed to cover the operating and maintenance costs, debt service expense, and other requirements of the water and wastewater system. County regulations require that meters and meter installations charges be paid prior to the issuance of the first building permit in a project to be served by the County's water system.

In the 2015 budget fiscal year, a total of 13,835 meters of various size and purpose were purchased by the Orange County Utilities Department (Utilities) to address the needs of new growth and meter replacement programs. Utilities recorded water meter installation fee revenue for the fiscal year ended September 30, 2015, as follows:

Type of Installation Charge	Amount
Residential Water Meters	\$ 414,528
Residential Reclaimed Water Meters	384,715
Commercial Water Meters	207,001
Commercial Reclaimed Water Meters	62,335
Residential Irrigation Water Meters	28,140
Commercial Irrigation Water Meters	12,975
Total	\$1,109,694

Meter installation fees may be collected less than a month before the installation of a residential irrigation water meter at an existing home to several years before the installation of a meter for a larger planned development.

Utilities uses several different computer applications and databases to record financial, engineering, water/wastewater volume, and field operational activities. MAXIMO maintains information on maintenance activities, asset management, and inventory information. The customer service master inventory for meters is maintained in the MAXIMO database. The Customer Care and Billing System (CC&B) integrates the developer and customer account histories and billings.

INTRODUCTION



Scope, Objectives, and Methodology

The scope of the audit was limited to a review of controls over water meter installation revenue and water meter inventories. The audit period was from October 1, 2014 to September 30, 2015. In addition, controls and procedures through the completion of fieldwork in September 2016 were considered. The objective of the audit was to determine whether controls over water meter installation revenue and water meter inventories were adequate.

To determine whether controls over water meter installation revenue and water meter inventories were adequate, we conducted interviews with various Utilities' personnel within the Customer Service, Field Services, Fiscal, and Engineering Divisions. These inquiries helped ascertain the various procedures and processes utilized by the Utilities Department to record water meter service transactions from the purchase of the meters to the installation at a service location.

We also identified the total number of water meters purchased with budget fiscal year 2015 funds. We then determined the recorded status of those meters as on-hand or installed. We conducted a physical inventory count to verify the number of meters that were physically located at either the Utilities' warehouse or on service trucks. We reviewed installation records to determine if the meter was a replacement with no payment required, or a new premise/service point location with the appropriate charges collected. To resolve any noted discrepancies, we compared our results to queries of MAXIMO and CC&B to determine the proper recorded location of each meter.

To determine whether charges were properly received and recorded, we compared new meter installations recorded in MAXIMO to the CORE System's query report of customers' pre-payment of meter installation fees. CORE is the one-step payment processing software used for cashiering processes. We then traced the pre-payment transactions to the Orange County General Ledger record of installation and connection fee revenues for the months of October 2014 through September 2015.

INTRODUCTION



Audit of Orange County Utilities
Water Meter Installation Revenue

Overall Evaluation

Based on the results of our testing, controls over water meter installation revenue and water meter inventories were adequate. An opportunity for improvement is discussed herein.

RECOMMENDATIONS FOR IMPROVEMENT

1. Meter Location Records Should Be Monitored and Updated to Resolve Location Discrepancies between Software Data Applications

The Utilities Department (Utilities) purchased 13,865 meters during fiscal year 2015. During our testing, we were able to ascertain the location status of all but 13 meters recorded as in-stock. Although these meters were reported as in-stock, they could not be located by Utilities personnel during our review.

While following up on the 13 meters that were not located, we noted 414 meters with a current location recorded in MAXIMO as "Missing Water Meters." These meters were part of the approximately 365,000 meters purchased and/or in service from November 2001 to December 2015. We reviewed installation records of the 33 meters purchased between fiscal years 2011 and 2015 and were able to determine that 18 of the 33 meters recorded as missing were likely related to data entry errors and were not missing. However, 15 of the meters appeared to be missing and could not be accounted for by Utilities. Although these meters represent a very small percentage of the meters purchased, our detailed review noted that while removal dates were recorded, disposal records for meters were not updated with the final disposition of the meter. Records for all meters removed from service should be updated with the disposition of the meter (e.g., returned to the vendor under warranty, scrapped, or unauthorized removal, etc.).

Complete and accurate inventory records assist in maintaining proper levels of inventory to minimize delays caused by out of stock items. Further, each installed meter represents a billing location required to ensure proper billing and revenue collection.

Utilities personnel are working to identify and resolve discrepancies relating to meter locations. Based on our testing, the meter inventory is well accounted for by the various systems. We commend Utilities for their controls relating to water meter inventories and installation.

RECOMMENDATIONS FOR IMPROVEMENT



Audit of Orange County Utilities
Water Meter Installation Revenue

We Recommend Utilities continues to identify and resolve discrepancies in recorded locations between its data systems. Additionally, the reason for and method of a meter's disposal upon being removed from service should be recorded (e.g., removed due to age, malfunction, tampered with, stolen, returned under warranty, or scrapped).

Management's Response:

Concur. Utilities staff will work to resolve existing discrepancies, which represent less than 0.01% of all meters in service during the audit period. Staff will also document the respective causes for meters removed from service.

Furthermore, Utilities thanks the Audit staff for commending our controls related to water meter inventories and installation. We strive to put procedures and systems in place to maintain thorough and accurate records.