



Follow Up Review of Meter Reading & Billing: Electric & Water Utilities Audit

Madison Rorschach
City Auditor
City Auditor's Office
November 14, 2023



Purpose of the Follow-Up Review

- Provides a progress update on audit recommendations.
- Audit project evaluated effectiveness of the City's electric & water meter maintenance, accuracy testing, reading, and billing processes.
- Review found improvement; additional water meter testing needed.



AUDIT OF METER READING &
BILLING

Electric & Water Utilities

ABSTRACT

The City has generally established an adequate process to maintain electric and water meters though additional documentation consistency would further clarify account history. Improvements to water and electric meter testing would provide further assurance that the City is accurately capturing utility usage. Additionally, meters are generally read effectively and appropriate procedures to monitor read accuracy are in place. Finally, utility bills are calculated accurately based on approved utility rates.

Internal Audit Department

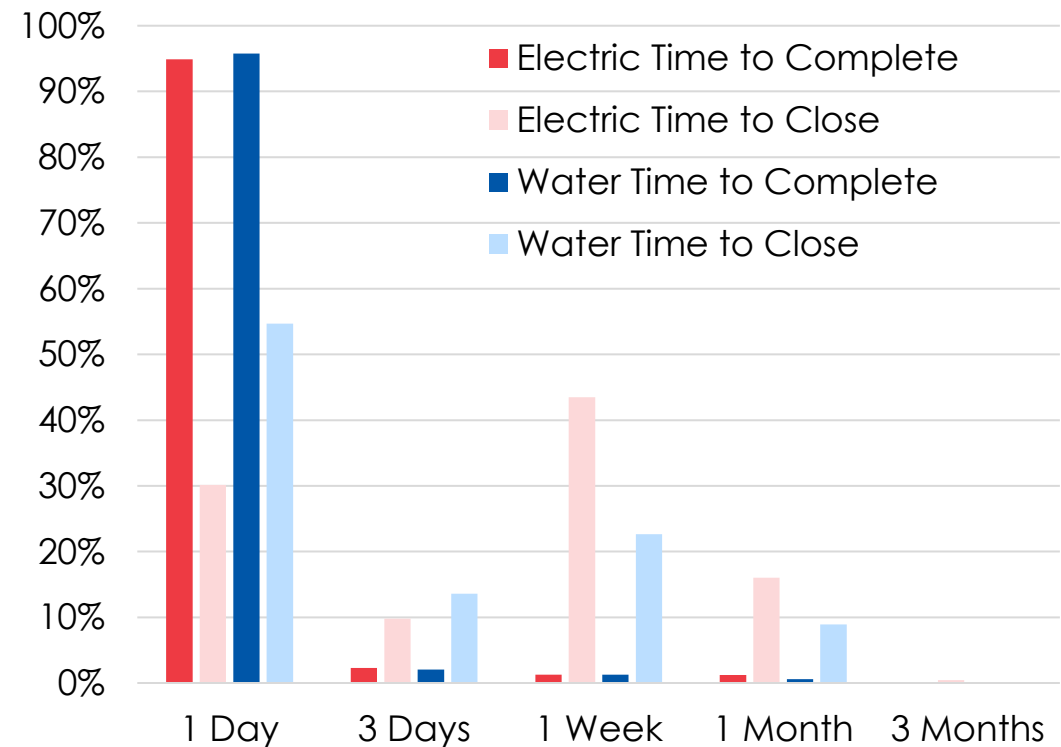
City Auditor
Madison Rorschach, CIA, CGAP

Audit Lead
Neeraj Sama, MBA

Meter Work Order Guidance Created; Water Using Different Work Order System

- Guidance for billing system work orders created.
 - New field created to aid in measuring work order timeliness.
 - All work orders generally include adequate information.
- Water dual work order system usage has continued data issues.
 - Plans to only use billing system going forward while working on system integration.

Meter Work Order Timeliness



Electric Meter Test Program Effectively Reinstited

- Denton Municipal Electric has effectively reinstited its Meter Test Program.
 - Meter test result data is periodically downloaded to avoid future result losses.

Electric Meter Test Program Verification (Oct. 2023)

Meter Type	Current Meters	Testing Est.	2022 Tested	2023 Tested
Residential	57,407	2,870	2,655	1,833
Commercial	5,332	267	284	298
Instrument Rated	1,624	162	123	131
Top 100	100	NA	108	NA

Water Meter Testing Has Resumed; Water Implementing AMI System for Small Meters

- All meter testing generally halted after original audit.
 - Large water meter testing resumed recently after new testing equipment was purchased.
 - Small meters will be replaced over next few years with AMI system.

Active Large Water Meters Tested (May – Oct. 2023)

Meter Size	Meters	Percent Tested
3"	173	14%
4"	71	14%
6"	24	442%
8"	71	11%
10"	2	0%
All:	341	15%

New Billing Adjustment Reviews Process Effective; AMI Data Sharing is Expanding

- Original audit found meter reading accuracy checks were generally effective & bills were calculated accurately.
- New billing adjustment review process implemented.
 - 100% of reviewed billing adjustments had adequate explanatory comments.
- New customer portal will be rolled out in 2024.
 - Will allow customers to see 15-minute interval electric usage data.



Follow-Up Report Summary:

Improvement Made; Addt'l Water Meter Testing Needed

Audit Area	Recommendations	Implemented	In Progress	Not Implemented
Billing System Work Order Mgmt.	2	100%	0%	0%
Water Meter Work Order Issues	2	0%	100%	0%
Electric Meter Testing	3	100%	0%	0%
Water Meter Testing	4	25%	75%	0%
Billing Adjustments	3	100%	0%	0%
	14	64%	36%	0%



Questions?

Madison Rorschach

City Auditor

City Auditor's Office

