



MEMORANDUM

To: Mayor and Council

From: Robert D. Goode, P.E., Assistant City Manager

Date: January 19, 2016

Subject: High Water Bill Concerns Update

This memorandum provides updates and follow-up information related to the high water bill concerns experienced last summer and subsequent discussions at the Council's Public Utility Committee meetings.

Austin Energy and Austin Water continue to investigate any remaining customer high bill concerns. Austin Water continues to assist customers with irrigation system assessments. While water consumption has reduced significantly since the peak in the summer months, we are committed to continue to address any customer concerns that remain.

High Bill Escalations Statistical Update

During three Public Utility Committee meetings in September, October and November of 2014, Austin Water and Austin Energy presented updated high bill concern statistics. Austin Water and Austin Energy have continued to investigate customer's high bill concerns. An update to these statistics is detailed below:

Between August 23, 2015 and January 2, 2016, the Utility Customer Service Office received 23,944 customer calls related to water bill inquiries. After a review of current and historical usage patterns with the customer, the vast majority of water bill inquiries were resolved to the customer's satisfaction during the initial call or usage was validated through a first level meter re-read or a field leak check.

If an inquiry could not be resolved through the initial phone call, staff continued to work with customers regarding their concerns through the escalation process, which could include additional meter re-reads, field leak checks, and the offer of an irrigation audit through Austin Water. Since August 23rd, 5,268 customers have moved through the water bill inquiry escalation process. The majority of escalation cases verified original metered usage and bill accuracy. As of January 2nd, only fifteen escalated cases remain open at Austin Energy, down from a peak of 982 open escalation cases in early September.

Austin Energy and Austin Water recognize that in some situations, higher than normal usage may stem from unidentified leaks. As such, we perform high-level site visits in an

attempt to identify potential leak situations. Leak checks were completed on 1928 meters with no leaks found and customer was notified. The process identified an additional 138 meters with indications of a potential leak on the customer's property, and a notification letter was sent to the customer. 19 meters had water visible in the meter box, indicating a potential city or customer leak, requiring further review by Austin Water.

Since August of 2015, Austin Water has conducted 460 irrigation system assessments for customers with high bill concerns. Through January, Austin Water has scheduled an additional 6 irrigation system assessments. Results from these irrigation system assessments include 92% of the systems were set with multiple day, multiple start times, or excessive run times.

Austin Water Meter Reading and Meter Accuracy Audit

After the November 2015 Council Public Utilities Committee meeting, Austin Water initiated a solicitation for consultants to perform a Water Meter Reading Accuracy Audit and a Meter Accuracy Testing Audit. The firm UtiliWorks Strategic Utility Consultant was hired to conduct these audits.

The Meter Reading Accuracy Audit scope of work consisted of the consultant conducting meter reads on at least 1,000 water meters and performing analyses comparing audit reads to those obtained by the City's current meter readers, Corix. Additionally, the consultant would submit a report and supporting documentation on meter reads, meter issues, photos, and analysis of meter read accuracy and comparisons.

The Meter Accuracy Testing Audit scope of work consisted of the consultant assessing the City's accuracy testing on a total of 30 water meters, spread between the Council districts. The consultant would witness and assess Austin Water staff and processes during the removal of the 30 water meters, the use of meter accuracy testing equipment, and the results of the City's meter accuracy tests. Additionally, the 30 water meters would be shipped to the consultant's independent water meter testing facilities for a second accuracy test. The consultant would submit a report on their assessment of Austin Water's meter accuracy testing procedures and equipment and the results of the meter accuracy tests comparison between the City's accuracy results and the consultant's independent accuracy testing.

The report of UtiliWorks on the water meter reading and meter accuracy testing audits is being finalized at this time and will be transmitted to Council when received. Austin Water has received a draft report that was the basis for the summary below and the presentation provided to the Council PUC.

Water Meter Reading Audit

Consultant attempted to read 1,163 meters over 8 days in December and January. Meters in all Council districts were represented. There were 19 or 1.6% of the selected meter audit read sites which could not be recorded due to foggy/cloudy/scratched lenses or meter pits that could not be located. Additionally, there were 6 reads or 0.5% of the selected audit reads which were

removed from the overall statistics due to readings were unable to be verified against photo evidence due to blurred pictures.

The remaining audit reads totaled 1,138 or 97.9% of the 1,163 selected meter audit reads which were read by both Corix and the Consultant. Of these 1,138 audit reads, 981 or 86.2% were exactly the same reading between Corix and the Consultant. There were 142 reads or 12.5% which had a small difference in gallons that seemed consistent with the difference in time between reads. For these meters, the average accuracy rate was 98.86% when comparing the two reads.

There were 15 or 1.3% of the total 1,138 reads that were determined to be "discrepant" readings where readings by auditor were different than Corix reads and required additional research. There were 3 of these 15 discrepant reads that triggered the high/low test of the billing system and were subsequently reread and adjusted to corrected bills through the process. Most of the other discrepant reading appear to be keying errors or transpositions of numbers.

Austin Water has mapped the meter reads obtained during the audit. The map is attached.

Meter Accuracy Testing Audit

Austin Water staff removed a total of 30 water meters, spread between the Council districts, from the field during early January. These meters were transported back to Austin Water meter shop for accuracy testing. The Consultant witnessed the process and procedures for removal of the meters, transport, and accuracy testing on the City's equipment. These meters were then shipped to the Consultant's independent meter testing facility in New Jersey. The meters were tested for accuracy on the Consultants equipment.

The meter accuracy testing results of the 30 meters by both the City and the Consultant is comparable. There were 11 of the 30 water meters that failed AWWA standards. All failed meters were under-registering consumption. The Consultant provided recommendations of how Austin Water can strengthen its procedures to ensure consistent processes for removal of meters. The Consultant also noted that meter accuracy testing equipment should be calibrated annually which Austin Water does through the manufacturer of the equipment.

Austin Energy Billing System Audit

In November 2015, Austin Energy engaged Certified Public Accounting firm Baker Tilly Virchow Krause, LLP (Baker Tilly) to conduct an independent review of City of Austin Utility residential water bills and confirm that the City of Austin's utility billing system, Customer Care and Billing (CC&B), appropriately calculated usage tiers and applied tiered rates according to Austin Water's rate tariff. The firm reviewed a statistically valid sampling (95% confidence with 4.5% tolerable error) of residential water bill segments billed during the period January 1, 2015 through September 30, 2015.

Baker Tilly obtained an extract of residential water billing data from CC&B, assigned random numbers to the billing records, and generated a random list for selection of

records meeting the valid sample size. Austin Energy then provided bill copies to the firm for review and testing, including the following steps:

- Confirmation that ending meter read minus beginning meter read equaled total consumption stated on bill
- Confirmation that consumption stated on bill matched total number of gallons billed under the tiered rate structure
- Confirmation of interval structure application for each tier according to the applicable rate tariff
- Confirmation that each tier was billed using the appropriate rate for the tier according to the applicable rate tariff
- Confirmation that Customer Assistance Discount Program volumetric discount was applied, if applicable

Attached is the independent accountants' final report showing no inaccuracies or incorrect billings. This independent finding, coupled with the findings of the meter reading and meter accuracy audit, prove a high degree of accuracy for water bill production based on validation of core metering and billing processes.

At November's PUC meeting, several committee members requested additional information on recommendations presented to Austin Energy by the Office of City Auditor (OCA) as a result of a 2014 audit on water meter reads. Attached is a memo providing a summary of Austin Energy's response to OCA findings

High Bill Concern Conclusions

Over the last several months, significant information and discussion has been provided to the Public Utilities Committee and Council. The analysis and audits performed support the following conclusions:

- Unusual late spring/early summer weather patterns shifted the onset of higher water usage
- Systematic checks of water pumpage verify customer usage during extreme dry period last summer
- Metering system is accurately measuring consumption, both through the meter and through the capturing of meter reads
- Meter read processes provide a high accuracy rate of reads for billing purposes
 - Procedures are in place to handle any reads that are skipped or produce high or low expected consumption levels
- Billing system is accurately providing customer bills
- Other cities across Texas experienced similar consumption patterns resulting in high bill concerns
- Austin Water and Austin Energy worked through significant customer contacts and analysis of bill concerns to provide customers with appropriate process for review

Next Steps

Austin Water and Austin Energy continue to work through and resolve any remaining customer concerns or administrative hearing requests related to last summer's high bill concerns.

One remaining issue that Austin Water will continue to analyze is our current administrative high bill adjustment policy. Austin Water is compiling information from other cities on whether they have any similar policies. They are also analyzing potential alternatives for consideration for any change in the policy. Austin Water would expect to update the Public Utilities Committee and Council in the coming months regarding our analysis and any recommended changes to the policy.

If you have any questions or need additional information please contact me.

Attachments:

- Map of Meter Read Audit Sites
- Baker Tilly Engagement Letter
- Baker Tilly Water Bill Review Audit Report
- Austin Energy January 14, 2016 Memo Summary Response to Office of City Auditor Water Billing Process Findings

cc: Marc A. Ott, City Manager
Greg Meszaros, Director, Austin Water
Mark Dombroski, Acting General Manager, Austin Energy
David Anders, Assistant Director, Austin Water
Elaine Kelly-Diaz, VP Customer Acct Mgmt, Austin Energy
Jawana Gutierrez, VP, Customer Care Services, Austin Energy