

CHARLOTTE-MECKLENBURG UTILITIES
ADVISORY COMMITTEE
MINUTES OF MEETING
June 20, 2013

The Charlotte-Mecklenburg Utilities Advisory Committee met Thursday, June 20, 2013, 2:30 pm at 4222 Westmont Drive, Charlotte, North Carolina.

Members Present: Pride Patton, Frank McMahan, Ron Charbonneau, Eric Sieckmann, Ralph Messera

Members Absent: Jim Duke, Jim Merrifield

Staff Present:	Barry Gullet	Director
	Kim Eagle	Deputy Director
	Barry Shearin	Chief Engineer
	Chad Howell	Business Manager
	Steve Miller	Customer Service Manager
	Regina Cousar	Continuous Improvement Officer
	Vic Simpson	Internal Communications Manager

Safety Minute

Heat exhaustion symptoms and risk factors

Minutes

A motion was made by Frank McMahan, and seconded by Eric Sieckmann, to approve the May 2013 minutes.

Customer Service Functions

- The Customer Service Division (CSD) was established in 2004 with staff from City Finance, CMUD Field Operations and CMUD Engineering.
- Currently, CSD has approximately 130 employees located at General Commerce Drive and Brookshire Boulevard. CSD is looking to decentralize and move into the four zones established for Field Operations.
- Annual budget of \$7.8 million
- Primary functions include:
 - Meter reading
 - Ensuring reading/billing accuracy
 - Meter maintenance
 - Service requests
 - Account services – includes all account types, not just residential
 - Backflow prevention - includes reviewing plans, field work, etc.
 - Reorganization may make this function move into other divisions such as Engineering and Field Operations.
 - The backflow prevention program began in the 1990s and focuses on new customers presenting higher risk situations such as business, industrial, and irrigation systems.
 - In some cases, upgrades to buildings, plumbing systems, or irrigation systems can trigger a requirement to install a backflow preventer for an existing customer, but retrofitting is generally not required currently.

- Backflow preventers are required to be inspected annually, which requires the production of paperwork and staff to review and track the paperwork.
 - Private companies perform the annual inspections and CMUD provides training to the inspectors.
- Water meter installations include three components – meter, register, and ERT (encoder receiver transmitter) which cost approximately \$110. The register is \$45; the transmitter is \$65.
- Meters currently being installed have absolute encoder technology; but there are quite a few pulse-type meters remaining in the system. Absolute encoder meters sense the actual reading from the mechanical meter register, and convert that reading to a digital signal for transmission. Pulse-type meters generate an electronic “pulse” each time a unit of water passes through the meter and keep count of the number of pulses independent of the mechanical reading on the meter register.
- CSD currently employs three meter readers. Before conversion from a “walk by” system to a radio read, drive by meter reading system in 2002, CSD employed 35 meter readers.
- Most large meters have automated meter readings (AMRs).
- Staff read meters and send bills almost every day. There are 19 billing cycles throughout the month. Each cycle varies from 5,000 – 26,000 accounts that are not geographically contiguous, which results in unbalanced workloads.
- Currently, a project is underway to realign the billing cycles to maximize efficiency by balancing workload, reducing time between meter reading and bill issuance, and improving billing period consistency.
- After meters are read, the readings go through a pre-billing review process. Currently, 272,000 meters are read each month; and of those, about 3,800 residential and 3,500 commercial readings are missed monthly because of problems with the electronic data transmission. When readings are missed, a meter reader goes back to the location and re-reads the meter electronically and/or manually.
- Each month, about 33,000 accounts are flagged as an exception and each are analyzed separately. Exceptions occur when the meter reading is outside of expected parameters for that account.
- A total of 12,000 meter reading site visits are performed per month for a variety of purposes.
- The top four service order types include – move in, move out, delinquent turn off and delinquent turn on. Other service order types include leak investigations, high bill inspections, pressure issues, inactive accounts with usage and general maintenance.
- **Delinquency Issues**
 - People can’t live without water so long term denial of service is not a reasonable solution in most cases
 - Delinquent accounts demands a lot of CMUD staff time and resources to resolve.
 - 60% of CMUD calls through 311 are related to delinquencies
 - 5,500 payment arrangements are made per month to allow delinquent customers an opportunity to pay balances over an extended time period.
 - There are an average of about 3,500 delinquent accounts per month
 - Average payment arrangements are for balances of about \$240 and the default rate is about 40%
 - Customers with delinquent accounts are required to pay the current amount owed plus payment arrangement amounts and associated fees
 - Delinquencies account for 45% of the CMUD field service orders
 - On average, about \$2,000,000 in bad debt is written-off each year
 - Char-Meck 311 receives about 22,000 account inquiries, 5,500 requests for new payment arrangements and requests for 1,900 delinquent turn-ons per month which costs about \$211,000 per month (approximately \$2.5M/year). The 311 Call Center bills CMUD

based on their operating costs and the number of calls they receive. Current costs are \$7.19 per call.

- The 311 E-Team was formed to handle escalated complaints. They handle approximately 300 calls per day that require a higher level of training and expertise than the general 311 Customer Service Representatives have. 311 staff is able to fully resolve approximately 98% of the calls received.
- The trigger that puts customers into delinquency is \$25 in past due water charges.
- When a customer pays a partial bill, the payment goes to stormwater charges first, sanitary sewer charges, and then water charges. A customer's stormwater bill is based on the amount of impervious area associated with his/her property and is not related to CMUD water or sewer service. All of the funds collected for stormwater charges go to City, County, and/or the towns' storm water utilities, not to CMUD.
- Crisis Assistance Ministries (CAM) is designated as the financial assistance organization for the local utilities (power, gas, water, etc) and CMUD works closely with them. CAM helps customers one time to pay delinquent bills and to coach them about ways to manage their personal finances to avoid delinquency in the future.
- Late Fee/Process:
 - On the sixth late day, a 1.5% late charge is issued
 - 30 days – Customer receives courtesy notification
 - 36 days – Delinquent turn off service order sent to the field & \$58 delinquency fee issued
 - 41 days – Final bill sent
 - 62 days – Final bill due date
 - 81 days – Account sent to bad debt
 - This process is very lenient compared to other utilities.
 - Each month, about 3,500 accounts go into delinquency
 - Of those 3,500 accounts, 2,600 services are cut off for non-payment.
 - Of those 2,600 services, 1,900 customers pay the bill and have their water restored.
 - About 350 customers turn their water back on illegally after CMUD turns water off. If usage is found when account is inactive, CMUD will place a lock on meter.
 - Some customers will break the lock and turn the water back on. At that point, the meter is removed, the line is plugged to further prevent usage, and then the meter is reinserted in the box.
 - Each of these incremental steps and reversal of these steps requires CMUD action and incurs additional operating costs.
- Requests for high bill investigations have decreased since 2010. CMUD entered into an agreement with American Leak Detection to find leaks on private property for customers when a dispute arises as to whether the customer has private leak or not.
- When a meter is brand new, it should be accurate to within 0.5% of the actual reading. Meters tend to under-report usage as they wear over time. Most utilities change meters every 10-15 years. Currently, CMUD staff is researching the most cost effective process for determining when meters need to be replaced that will be based on water usage rather than time.
- CMUD depends on the City Finance Department to collect payments for the city services bill. Printing and mailing the water bills is outsourced to Kubra, a private company located in Georgia.
- **40 Point Improvement Plan**
 - Structural changes to CMUD's rates and increases to the rates that were made during drought conditions when outdoor water use was restricted caught some customers by

surprise when they resumed lawn watering in 2009 and received bills that were higher than they expected. In addition, some meter installations were beginning to experience problems due to a variety of conditions. These factors all combined to quickly erode customer confidence in the water billing process and resulted in a large number of complaints to elected officials.

- In response to the elevated number of complaints, the City Manager directed an evaluation starting in January 2010 which led to a cross departmental team and the 40-Point Improvement Plan
- Outcomes of the 40-Point Improvement Plan include:
 - An audit of water meter equipment
 - Customer Service Division reorganization
 - Implementation of pre-bill and high bill inspection changes
 - Enhanced communications
 - Contracted with third-party leak detection company to find private property leaks
 - Trained/Established 311 E-Team
- **Metering Strategy**
 - 2009-2011 – Visited other utilities
 - 2011-2012 – Piloted studies of available technology; issued RFI in May 2012; vendor presentations held July-December 2012
 - 2013 – Developed meter requirements January-March; developed technology requirements March-June; Issue RFP to begin selection process in Fall 2013
 - 2014 – Take new strategy and contracts to City Council for approval

Goose Creek Moratorium

- A state-imposed moratorium on new water services in the Goose Creek basin (Mint Hill area) has been removed.
- There are some subdivisions in the Goose Creek basin that have private water systems.
- Some of the citizens currently served by those private systems are dissatisfied, so CMUD is working to determine how their service can be improved.
- Options for improving service to customers in this area include:
 - Buying the private system and hooking customers up to CMUD water
 - Installing a parallel system
 - Installing a master meter and selling water to the private company.
- Barry Shearin, Chief Engineer, is meeting with the private water company and HOA members and Town of Mint Hill officials to identify the best solutions. Approximately 80 of the 190 homeowners are interested in paying to connect to a potential parallel system.
- Based on previous purchases of similar systems, CMUD estimates the cost to buy the private system would be approximately \$500,000.

Adjourned at 4:08 pm
Karen Baldwin