

MINUTES – FEBRUARY 23, 2017 **CLEVELAND UTILITIES BOARD**

The Board of Public Utilities met at 12:00 p.m. at the Tom Wheeler Training Center.

Present were the following: Aubrey Ector, Chairman; Eddie Cartwright, Vice Chairman; Tom Rowland, Mayor; Joe Cate, Cleveland Utilities Board; Chari Buckner, Cleveland Utilities Board; Tim Henderson, President/CEO; Amy Ensley, Utility Board Secretary; Marshall Stinnett, VP/CFO; Bart Borden, Electric Division VP; Craig Mullinax, Water and Wastewater VP; Walt Vineyard, Information Technology VP; John Corum, VP Administrative Services; Jan Runyon, Assistant VP Administrative Services; Jeff Luther, Electrical Engineer; Mike Isham, Line Section Supervisor; and Larry Bowers, *Cleveland Daily Banner*. Following the Pledge of Allegiance to the American Flag, Mike Isham delivered the invocation.

MINUTES OF JANUARY 26, 2017

On motion by Vice Chairman Eddie Cartwright and seconded by Chari Buckner, the Board of Public Utilities voted to approve the January 26, 2017, minutes as written.

MANAGER'S UPDATE AND ANNOUNCEMENTS

Awards Banquet Reminder

President/CEO Henderson reminded board members about the upcoming Annual Awards Banquet on March 8, 2017, where employees will be recognized for years of service and perfect attendance. The banquet will be held in the Tom Wheeler Training Center.

Budget Presentation

Work is ongoing for the FY 2018 budget preparation. The goal is to present the budget for the Utility Board's review at the board meeting scheduled for March 23, 2017, prior to presenting to the City Council at the City Budget Retreat on April 10, 2017. Henderson advised the meeting would probably last longer than normal and offered to move the time of the meeting to earlier in the day if needed. Board members agreed to maintain the scheduled 3:00 p.m. time.

DIVISION REPORTS

Financial

Marshall Stinnett reported on the following:

1. A chart tracking the kilowatt-hour cost in residential retail electric rates for the months of March 2013 through March 2017 was reviewed. For the month of March, the residential electric rate will change to 9.282 cents per kilowatt-hour, a decrease of 1.28 percent over February's rate of 9.403 cents. This rate change is driven by TVA's Fuel Cost Adjustment.
2. The January 2017 financial and statistical statements were presented to the Utility Board. During the month, the cost of purchased power as a percentage of retail sales was 83.7 percent, as compared to 79.4 percent for the month of December. The year-to-date percentage is 80.8, compared to a budgeted percentage of 80.9 for FY 2017. This percentage increased during January because of the warmer weather experienced. The results for January are electric sales revenue of \$8,115,118, which was offset by purchased power of \$6,788,883. This resulted in an operating margin of \$1,326,235 and can be compared to a budgeted margin of \$1,754,571 for the month. Operating expenses for the month were \$1,492,955, compared to the budgeted amount of \$1,524,806. The division serviced 31,361 customers. The net

loss for the month was \$17,565 and can be compared to a budgeted net income of \$366,710. Stinnett noted the division fared well considering the temperatures experienced during the month. This can be attributed to the rate increases and changes in the rate structure.

3. For January 2017, water sales revenue was \$1,129,347, compared to the budgeted amount of \$1,071,798. Other revenue sources contributed an additional \$96,101 for the month. The division serviced 31,297 customers. Operating expenses for January were \$1,255,918. The division recorded an operating loss of \$30,470 and can be compared to a budgeted operating income of \$13,246.
4. For January 2017, wastewater treatment revenue was \$962,004, compared to the budgeted amount of \$971,713. Other revenue sources contributed an additional \$63,031 for the month. The division serviced 18,671 customers. Operating expenses were \$925,746 and can be compared to a budgeted amount of \$898,103. The division recorded an operating income of \$99,289, compared to the budgeted amount of \$156,854 for the month.

Electric Division

Bart Borden reported on the following:

1. In reference to the Harriman Road/Spring Branch Industrial Park transmission line, the request for bids to supply the steel poles for the entire project was issued and bids were received. The request for approval to purchase the poles will be presented under new business on today's agenda.
2. Work progressed on the switchgear and metering project at Cleveland State Community College, which included installation of the S&C pad-mounted Vista switchgear, primary metering pole, metering transformer rack, overhead and underground primary conductors and terminations. Cleveland Utilities is presently waiting on Cleveland State's electrical contractor to install their new primary conductors and pad-mount transformers for the college. This will have to take place before the new equipment can be energized and placed in service.
3. Engineering personnel completed the work order design for the first phase of the District to Lang Street 69 kV transmission reconductor project. All of the required steel poles, conductor, insulators and required materials are in stock. The work will begin when system loads reduce with the spring weather, which appears to be earlier than normal.
4. Electrical Engineer Jeff Luther displayed the recently purchased DJI Phantom 4 Pro Drone and gave an overview of its capabilities. There are a number of uses for the drone, such as inspection of pole tops and lines to identify problems more effectively and efficiently. The drone is equipped with a high performance, 20 megapixel camera. Several aerial pictures taken with the drone were shown, consisting of the Payne Gap Substation power transformer, Honorable Mayor Tom Rowland Interchange 3D, Cleveland Utilities Power Service Center and the CU Maintenance Building. The photo of the Maintenance Building showed visible rusted areas along the roof, and this is a project that will be bid in the near future and presented for board consideration. Luther and Engineering Technician Nathan Casteel have both obtained their Federal Aviation Administration (FAA) Commercial Drone License by passing the FAA's Part 107 exam. Borden thanked Luther for his assistance and providing the information.
5. The line construction crews were extremely busy during the month. Crews dug in 4,740 feet of conduit and installed 36 underground fed services to residential single

structure homes and townhomes. The installation of 36 underground fed electric services in a month is very encouraging from a system growth standpoint.

6. Borden praised personnel from the Garage area for the work they perform on CU's fleet of vehicles and equipment. They are responsible for every motorized and trailered piece of equipment that serves the Electric, Water and Wastewater divisions. Preventative maintenance and repair are performed on a variety of equipment ranging from chain saws, cars and pickups, to bucket and line trucks, cranes and vactor trucks. Specialized equipment includes backhoes, directional boring machines, generators, compressors, conductor pullers and tensioners. The diversity of equipment requires a broad level of knowledge and skill of each mechanic, especially in hydraulics. Each possesses welding skills, computer diagnostic and analysis skills, electrical troubleshooting and a well-rounded mechanical background.

DeWayne Harris, Utility Fleet Foreman and 18.5 year employee, is responsible for overseeing all maintenance scheduling, repair, parts ordering, assisting with vehicle specification preparation and recordkeeping for the garage. James Milen and Jarod Pomeroy have almost 14 years of combined service at Cleveland Utilities and carry a Mechanic II classification. The three men have 26.5 combined years of experience in mechanical work before coming to Cleveland Utilities, for a total of 59 years of mechanical experience. Their knowledge and skill allow for "in-house" repair of many issues that have traditionally been performed by outside repair facilities. Examples of such repair include: diesel particulate filter system replacement, fuel injector and fuel rail replacements and hydraulic system repairs. Repairs such as these save Cleveland Utilities money by limiting downtime of the units and cutting specialized labor costs. Without their continued care and skill, CU would be relying solely on outside facilities and their scheduling, which do not always coincide with CU's need to utilize the equipment. The professionalism and expertise of these individuals are best demonstrated when storms or large water or sewer breaks occur and all necessary personnel and equipment are onsite working until services are restored. CU presently has a fleet of over 200 cars and pickups, large trucks, trailers and various other engine operated equipment that serves all divisions of Cleveland Utilities. Borden expressed appreciation to Harris, Milen and Pomeroy for their hard work and dedication to keeping CU's fleet on the road and operating efficiently and safely.

7. A new piece of equipment being applied to CU's system for reliability, the S&C TripSaver Single-Phase Recloser, was exhibited for viewing. The equipment is designed to isolate faults on single-phase lines, which are primarily residential areas typically protected by a line fuse. When the line fuse blows, it results in an outage and requires the response of a bucket truck. The trip saver allows for contact of objects, such as wildlife or trees. It will open and close based on relay curves programmed in the device and the number of operations allowed, much like a full-size line circuit breaker. CU's line crew personnel patrolled entire feeder circuits for District D-224, Lang Street L-214 and Valleyhead V-244 (diagrams were reviewed). These circuits have experienced the highest number of interruptions statistically on CU's system over the past year. Crews identified needed tree trimming, wildlife cover-up and conductor clearance issues. Any work identified, with the exception of the tree cutting (which was referred to CU's tree maintenance contractor Asplundh), was immediately performed. If the work required significant plant changes, it was

referred to the Engineering department for a work order. Work orders are issued for the addition of line fuses, single-phase reclosers, primary or secondary conductor replacements, overhead fault indicators and pole change-outs. Next month's report will include the system outage statistics for review.

8. An update was presented on traffic lighting:
 - CU's traffic lighting personnel completed the traffic light upgrades at the intersection of 25th and Ocoee Streets. The control cabinet, conflict monitor and controller was upgraded, LED signal heads, Wavetronix radar detection, new signal conductor, and a flashing yellow arrow for the northbound turning westbound movement were installed.
 - Cleveland Utilities Traffic Signal Coordinator reviewed plans for a new development and the impact of traffic in the northwest corner of the Paul Huff Parkway and Mouse Creek Road intersection. Plans are subject to change, but the initial traffic impact study indicated changes will need to be made to Mouse Creek Road northbound and southbound to support the increase in traffic volumes.

Water Division

Craig Mullinax reported on the following:

1. W&O Construction has completed 85 percent of the pipe gallery access improvements project at the Cleveland Filter Plant (CFP). Several photographs showing the progress were viewed.
2. Gilispie Construction has completed 20 percent of the liquid fluoride conversion project at the CFP. Angel Construction has completed 15 percent of the liquid fluoride conversion and other improvements at the Waterville Water Plant.
3. The project to paint the Bryant Drive water storage tank is 99 percent complete, and the tank was returned to service on February 13. Planet, Inc. is in the process of performing the final inspection. Before and after photographs were shown.
4. In reference to the 24-inch water main extension from Tasso Lane NE to the HUC Water Treatment Plant, Merkel Brothers Construction has completed the installation of approximately 18,400 feet of water main (67 percent of the project).
5. Angel Construction Company has completed the Old Alabama Road water main extension project. The scope of the project consisted of 6,390 feet of water main.
6. The Tennessee Department of Environment & Conservation (TDEC) approved the plans and specifications for the overflow pump station modifications. A bid date will be set in the near future in anticipation of obtaining board consideration at the April board meeting.
7. Engineering is reviewing plans for Eagle Creek, Phase 3, on North Mouse Creek Road. The 16-lot development will consist of 910 feet of 6-inch water main and 894 feet of 8-inch sewer main. Eagle Creek, LLC, is the developer.
8. The following developments under construction have been completed:
 - NTB Tire & Service Center at Mouse Creek Crossing.
 - Keystone Ridge Subdivision, Phase 2.
9. An update was provided for the Wastewater Rehabilitation Project:
 - The Basin 31-45 & 10-36 Rehabilitation project has been completed and documents have been submitted to close out the project. The project was completed \$658,409 below the bid price. Remaining funds from the project will be utilized on the next phase.

- The documents for Phase 3 of the Basin 31-45 and Basin 10-36 Rehabilitation project were submitted to the State Revolving Fund (SRF), and approval was received on February 16, 2017. Contracts are being finalized for signatures.
 - Portland Utilities began the project for replacement of the deteriorating 14-inch Candies Creek Force Main along Paul Huff Parkway. The bypass line was installed and connected on February 16, 2017. Pipe bursting is being utilized to install the pipe. An aerial photograph taken by Jeff Luther with the DJI Phantom 4 Pro Drone depicting the layout of the entire project was viewed. Additionally, a video of the work was shown and Mullinax explained the process. A section of the new 16-inch PVC pipe was displayed for viewing.
10. The meter department set 20 meters through January 2017, compared to 28 for January 2016 and 17 for January 2015. Of the 20 meter sets, 14 were single-family homes and 6 were townhomes.
 11. The total amount of rainfall recorded at the Cleveland Filter Plant as of February 20, 2017, was 5.05 inches (4.21 inches below average).
 12. A chart was reviewed for water demand through February 20, 2017. Demand is still strong. February totals are projected at 6.6 percent higher than the same period last year.

OLD BUSINESS

Approval of Revised Arc Flash Safety Policy

On motion by Joe Cate and seconded by Mayor Tom Rowland, the Utility Board took action to approve CU's revised Arc Flash Safety Policy. Since adoption of the original policy, the Electric Engineering department, with the assistance of Leidos Engineering, altered the relay settings to better meet arc flash requirements. Modifications to the relay settings have allowed linemen to work with standard Personal Protective Equipment (PPE) and/or cover-up. Two remaining circuits require additional PPE and/or cover-up while performing routine line work. These two industrial circuit relays have been programmed such that lineman can coordinate with the dispatcher to place the relays in alternate settings temporarily. These sensitive settings are for protection only while work is being performed. Additionally, the amendment added the requirement of face shields when connecting and disconnecting energized meters of any voltage level.

NEW BUSINESS

Approval of Purchase Order with Union Metal c/o Utility Sales Agency, LLC

On motion by Mayor Tom Rowland and seconded by Vice Chairman Eddie Cartwright, the Board of Public Utilities voted to approve a purchase order with Union Metal c/o Utility Sales Agency, LLC, in the amount of \$105,710 for 28 galvanized steel poles ranging in heights of 80 feet to 90 feet to be used for the new transmission and distribution line into the Spring Branch Industrial Park off of APD-40.

Approval of Purchase Order with Elster

On motion by Chari Buckner and seconded by Joe Cate, the Board of Public Utilities voted to approve a purchase order with Elster in the amount of \$52,331 for renewal of the AMI annual software maintenance agreement.

Approval of Task Order with Jacobs Engineering Group, Inc.

On motion by Joe Cate and seconded by Chari Buckner, the Utility Board took action to approve a Task Order with Jacobs Engineering Group, Inc. in the amount of \$64,800 for the preparation of an engineering report for evaluation of upgrading the high service pumps and

electrical systems at the Cleveland Filter Plant. The original Filter Plant was built in 1954 with upgrades and expansions in 1963 and 1996.

Approval of Professional Services Agreement with Barge, Waggoner, Sumner and Cannon, Inc.

On motion by Vice Chairman Eddie Cartwright and seconded by Mayor Tom Rowland, the Board of Public Utilities voted to approve Amendment No. 2 to the Professional Services Agreement with Barge, Waggoner, Sumner, and Cannon, Inc., in the amount of \$51,000 for Bid Phase Services and Construction Administrative Assistance for Improvements to the Flocculation and Sedimentation Basins at the Cleveland Filter Plant. This will revise the total contract amount to \$161,900.

OTHER BUSINESS

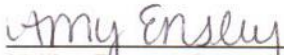
Future Board Meeting Dates

Following is a list of future board meeting dates to be held at the Tom Wheeler Training Center:

Thursday, March 23, 2017, 3:00 p.m.

Thursday, April 27, 2017, 3:00 p.m.

Thursday, May 25, 2017, 3:00 p.m.



Utility Board Secretary



Board Chairman

3/23/17
Date