

MINUTES – DECEMBER 1, 2016 **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; Jan Runyon, Assistant VP Administrative Services; John Corum, Safety Director; Steve Barger, Supervisor of Environmental & Regulatory Compliance; Chris Wilds, Facilities Maintenance Supervisor; Gerald Elliott, Cross Connection Control Coordinator; Mike Rader, Wastewater Collection Foreman; Ken Flowers, Equipment Operator; Freddie “Pokey” Gray, Water Distribution Foreman; Mark Lay; Rev. Rusty Asble; and Larry Bowers, *Cleveland Daily Banner*. Following the Pledge of Allegiance to the American Flag, Rev. Rusty Asble, Pastor of Recreation Ministry at First Baptist Church of Cleveland, delivered the invocation.

MINUTES OF OCTOBER 27, 2016

On motion by Mayor Tom Rowland and seconded by Eddie Cartwright, the Board of Public Utilities voted to approve the October 27, 2016, minutes as written.

MANAGER’S UPDATE AND ANNOUNCEMENTS

Offices Closed

Cleveland Utilities will be closed on Friday, Monday & Tuesday, December 23, 26 & 27, 2016, to observe the Christmas holiday. The schedule has not officially been determined for the New Year’s holiday; however, it appears offices will be closed Monday, January 2, 2017. Regular emergency and standby services will be maintained.

Safety Training Update

Safety Director John Corum provided an update on recent training held for Water Division personnel. A Permit Required Confined Space training was held on October 19, 2016 (31 employees attended), and a Trenching and Excavation Training was held on November 2, 2016 (25 employees attended). The training was conducted by Mike Simmons with the Tennessee Job Training & Safety Program (JT&S). Simmons worked at Sequachee Valley Electric Cooperative as the Safety Director for approximately 25 years and now serves as the statewide JT&S Director. He is very knowledgeable and was very well received by the attendees.

The trainings applied to a broad span of employees, and there was great participation and interaction amongst the work groups. Within the last year, there have been approximately 8 new employees hired in the Water Division, and the trainings were particularly helpful to those employees. Each session consisted of 3 hours of classroom instruction and 3 hours of field instruction on property owned by CU at Westside & 18th Streets. Corum advised he is hopeful more training of this nature will be conducted in the future. Additionally, the Tennessee Department of Environment and Conservation (TDEC) approved the trainings for continuing education credits for employees holding state operator certifications. Over the two days, 31 employees received a total of 186 continuing education credits that will go toward their state certifications. The training was beneficial on a lot of different levels, and great feedback was received from the attendees. Various pictures of the trainings were shown.

Corum expressed appreciation to Craig Mullinax for use of the site and to Aaron Finnell, Ken Flowers, Freddie Gray, Mike Rader, Chris Wilds and various other employees for their efforts and assistance with the trainings. President/CEO Henderson reminded of the importance placed on safety at Cleveland Utilities and advised these trainings are another way of emphasizing that focus.

Assistance & Outage Report

Electric Division VP Bart Borden advised two CU crews are currently assisting Sevier County Electric System with power restoration efforts resulting from the devastating wildfires. Based on the workload, crews are expected to return later this evening. Additionally, the following details were provided for outages experienced on CU's electric system earlier this week due to the storms:

Monday and Tuesday of this week

- On November 28, CU's Fletcher-224 circuit locked out at 8:46 p.m. Power was restored at 10:20 p.m. A total of 573 customers were affected, and the cause was from a sizable tree falling on Tennessee Nursery Road.
- On November 28, the Sequoia-244 circuit lost power at 8:47 p.m. impacting 506 customers. The power was restored at 9:40 p.m., and the cause was due to wind.
- On November 28 at 10:03 p.m., the East Cleveland-224 breaker serving 391 customers locked out. The outage lasted 52 minutes and was due to wind.
- On November 29 at 1:39 a.m., the Fletcher-214 circuit lost power for 58 minutes and included 325 customers. The cause was from a tree falling on Wynwood Drive.

Tuesday and Wednesday of this week

- On November 29 at 11:36 p.m., the Sequoia-244 circuit lost power again (this same circuit was out the night before and is listed above) for 82 minutes impacting 506 customers. The cause was unknown. Personnel are investigating this circuit very carefully in detail to identify the issue.
- On November 30, CU's District-224 circuit tripped at 1:04 a.m. Power was restored at 2:48 a.m. A total of 1,162 customers were affected and was the result of downed tree limbs over the lines.

A lot of the outage times are patrolling the circuits trying to locate the problem. It is extremely difficult to see during the night in the rain. Borden and Henderson commended the crews for their work in challenging weather conditions.

Christmas Luncheon

Board members were invited to attend the annual Christmas Luncheon scheduled for Thursday, December 15, 2016, from 11:30 a.m. to 1:30 p.m. at the Tom Wheeler Training Center. The menu will consist of turkey, dressing and all the trimmings.

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 December 2012 through December 2016 was reviewed. For the month of December, the residential electric rate will change to 9.630 cents per kilowatt-hour, an increase of 3.54 percent over November's rate of 9.301 cents. This rate change is driven by TVA's Fuel Cost Adjustment, as well as the transition into the winter rate.
2. The October 2016 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 82.3 percent, as compared to 82.5 percent for the month of September. The year-to-date percentage is 81.1, compared to a budgeted percentage of 80.9 for FY 2017. The results for October are electric sales revenue of \$7,256,432, which was offset by purchased power of \$5,973,657. This resulted in an operating margin of \$1,282,775 and can be compared to a budgeted margin of \$1,452,746 for the month. Operating expenses for the month were \$1,460,926, compared to the budgeted amount of \$1,515,342. The division serviced 31,120 customers. Net loss for the month was \$30,653 and can be compared to a budgeted net income of \$61,824. The shortfall was due to the amount of sales.

3. For October 2016, water sales revenue was \$1,314,757, compared to the budgeted amount of \$1,205,098. Other revenue sources contributed an additional \$131,375 for the month. The division serviced 31,327 customers. Operating expenses for October were \$1,244,013. The division recorded an operating income of \$202,119 and can be compared to a budgeted amount of \$128,036. The variance is being driven by the increased sales due to the drought.
4. For October 2016, wastewater treatment revenue was \$1,059,128, compared to the budgeted amount of \$1,013,250. Other revenue sources contributed an additional \$73,417 for the month. The division serviced 18,666 customers. Operating expenses were \$900,041 and can be compared to a budgeted amount of \$898,350. The division recorded an operating income of \$232,504, compared to the budgeted amount of \$201,703 for the month.

Electric Division

Bart Borden reported on the following:

1. The section of transmission line for the Blue Springs Road and APD-40 69 kV project was taken out of service on October 4th in order for the project construction to begin. The new steel poles and parallel 556 MCM all aluminum conductors have been installed, and the project was completed on November 17th. This project will remain on the Electric Division report to update the final financials. Borden pointed out the construction portion of the project is 22 percent complete rather than 9 as listed on the report.
2. In reference to the Harriman Road/Spring Branch Industrial Park Transmission Line, CU's transmission line designer has completed 90 percent of the 69 kV line from the South Cleveland Substation to the first major curve along Stone Lake Road. Due to the significant grade work that will take place on the Cherokee Gateway development site, CU is going to design and build the transmission line in phases.
3. The Engineering and Operations departments have been working with Pine Forest Apartments to do a service upgrade on all 11 of their buildings. Each building has 8 to 11 meters ganged within a meter center originally installed in the early 60's. The customer will be upgrading the old meter centers with new meter centers equipped with a 600 amp main disconnect. Cleveland Utilities will be replacing the existing direct buried service conductors with conduit and new service conductors.
4. The Engineering department is working with contractors and developers on multiple commercial projects and a new subdivision to provide electric service. Planning and design work have begun on the new campus project at Lake Forest Middle School, the new Southeast Bank at the corner of Keith Street and Raider Drive, Wendy's Restaurant at the corner of Paul Huff Parkway and Frontage Road, Lee University's new Bell Tower located on 6th Street SE, and three (3) new residential buildings in the Professional Park located off of Clingan Ridge Drive NW.

5. Engineering is working with the developer of Timber Creek Subdivision to design the electrical service for the third phase of the subdivision off of Peach Orchard Hill Road NE. This phase will consist of 23 new building lots.
6. CU's Electric Engineering and IT Geographic Information System personnel are working together to convert CU's Bentley Systems GIS system to ESRI's ArcGIS. The original GIS system was an Intergraph product and was installed in 1992. Bentley Systems transitioned the Intergraph product to its Bentley Geographic product. The decision to move to the ESRI GIS solution are multiple. ESRI provides GIS solutions to over 350,000 organizations worldwide and interfaces with more third party software solutions than any other available GIS system. CU's Water Division has been using both GIS solutions for a number of years now, due to the interface they needed for their water engineering model. ESRI will interface with CU's outage management, engineering analysis software, power line design CADD system, meter data management and customer information systems without complex interfaces for data interchange.
7. Borden recognized Nathan Casteel for completion of the Utility Training Services (UTS) Distribution Line Design and Staking Certification Program. Casteel is an Engineering Technician Level I and was promoted to this position on December 1, 2011. UTS's Power Line Design & Staking (PLDS) Certification requires successful completion of 84 hours of instruction consisting of four core classes (21 hours each), with demonstrated proficiency in each class. The multi-tiered program focuses on guiding students through the understanding and application of engineering design for electric distribution systems. Engineering concepts and formulas specific to power line design and relevant to the Field Technician's responsibilities are taught and enable participants to utilize the knowledge and skills gained for immediate on-the-job benefit. Students were given real world problems and projects and worked with various design and data collection equipment in the field. Borden advised he is very proud of Nathan for this accomplishment, as the program required a lot of time and studying.
8. Two linemen from CU's Operations department attended the directional boring and underground facility locating school at the Kansas Institute of Underground Technology in Beloit, Kansas. Line Foreman Ernie Cannon and Lineman Brandon Ingram attended the four (4) day training event and were very pleased with the information and knowledge they obtained. The Institute that is commonly referred to as U-Tech features a state-of-the-art, up-to-date curriculum, along with hands-on practical training opportunities to allow participants/students the opportunity to successfully complete the training needed to safely operate equipment used in underground technology. This training has resulted in more efficient installation, lower duty cycle on Cleveland Utilities underground boring equipment and safer operation around existing multiple utility lines.
9. An update was presented on traffic lighting:
 - Traffic Signal Coordinator Tad Bacon participated in a bicycle and pedestrian study along 25th and Keith Streets. The scope was from Georgetown Road to Keith Street on 25th Street and north along Keith Street to Sahara Drive. The results will be submitted to TDOT and incorporated into future planning projects.
 - Engineering personnel and traffic light crews have been preparing a work order, planning the work schedule and staging materials to rebuild the traffic signals at the 25th Street and Ocoee Street intersection. The wiring and

signal heads have reached their end of life, and maintenance calls indicate the work is needed. Due to the volume of traffic at this intersection, preparation work will take place during the daytime and the intersection will be taken out of service during the later night hours. This work will require the assistance of the City of Cleveland Police Department to direct traffic during the signal outage times.

Water Division

Craig Mullinax reported on the following:

1. An update was provided for the liquid fluoride conversion projects at the Cleveland Filter Plant (CFP) and Waterville Water Plant. The notice to proceed is effective December 5, 2016, at the Cleveland Filter Plant and January 3, 2017, at the Waterville Water Plant. Gilispie Construction will be performing the work at the CFP, whereas Angel Construction will be the contractor at the Waterville Water Plant.
2. The project to paint the Bryant Drive water storage tank is approximately 65 percent complete. Planet, Inc. is doing a great job, and the projected completion date is December 23, 2016.
3. Bids for the demolition of the raw water booster pump station on Dry Valley Road were received on November 29, 2016. Hampton Backhoe Services submitted the low bid of \$23,000. The other bids received were in the amounts of \$60,000 and \$120,000.
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 3,000 feet of water main.
5. Angel Construction Company has installed approximately 2,000 feet of pipe for the Old Alabama Road water main extension project. The project is being funded mainly by Bendabout Farms.
6. The water main extension project on Haney Road to serve the Dilling Corporation is being done at the request of the Industrial Development Board. Angel Construction Company will be the contractor performing the work. The total estimated project cost is around \$20,000, and the Industrial Development Board will be reimbursing CU.
7. Engineering is reviewing plans for the following:
 - Lake Forest Middle School on Kile Lake Road. The project will consist of 3,750 feet of 8-inch water main. Bradley County Board of Education is the developer.
 - Johnston Estates, Phases 1, 2 & 3. The development will consist of 4,300 feet of 6-inch and 8-inch water main. B&D Real Estate Properties, LLC is the developer.
8. Engineering has approved the following plans:
 - Haven at the Grove on Tasso Lane NW. The project will consist of 700 feet of 8-inch sewer main. Cate Brothers Development is the developer.
 - Suntrust Bank at Mouse Creek Crossing. The scope of the project includes 120 feet of 8-inch sewer main and 120 feet of 6-inch water main.
 - Keystone Ridge Subdivision, Phase 2, on Dry Valley Road consisting of 10 lots and 518 feet of 6-inch water main. RDG Group, Inc. is the developer.
9. The following developments under construction and nearing completion:
 - NTB Tire & Service Center at Mouse Creek Crossing consisting of 88 feet of 8-inch sewer main. The project is 95 percent complete.

- Brook Hollow Subdivision on Peach Orchard Hill Road consisting of 18 lots, 480 feet of 6-inch water main and 487 feet of 8-inch sewer main. The project is 95 percent complete.
 - Timber Creek Subdivision on Peach Orchard Hill Road consisting of 30 lots, 1,187 feet of 6-inch water main and 1,895 feet of 8-inch sanitary sewer. The contractor has completed 95 percent of the water main and 100 percent of the sewer main.
 - Weeks Drive Townhomes consisting of 7 lots and 150 feet of 8-inch sewer main. Hampton Backhoe Services has completed this installation.
 - Haven at the Grove on Tasso Lane NW consisting of 700 feet of 8-inch sewer main. 95 percent of the required work has been completed by Hampton Backhoe Services.
 - Keystone Ridge Subdivision, Phase 2, on Dry Valley Road consisting of 10 lots and 518 feet of 6-inch water main. The project is 95 percent complete.
10. An update was provided on the Wastewater Rehabilitation Project:
- The Wildwood & Inman SSES & Rehabilitation and Basin 31-45 & 10-36 Rehabilitation projects are both nearing completion.
 - The Basin 10A-8 SSES project has been on hold due to the drought. The contractor will soon resume the CCTV work on this project.
 - In reference to the Basin 31-45 and Basin 10-36 Rehabilitation, Phase 3, plans were submitted to the State Revolving Fund (SRF) and awaiting approval.
11. The meter department set 20 meters through October 2016, compared to 22 for October 2015 and 18 for October 2014. Of the 20 meter sets, 14 were single-family homes, 3 were apartments and 3 were irrigation meters.
12. The total amount of rainfall recorded at the Cleveland Filter Plant was 1.65 inches for the month of November (as of 11/29/16) and does not include the 5.07 inches received over the last 3 days. There was essentially no rainfall for the period of September 27 to November 27. For the period of April through November of this year, the total was 19.54 inches. Projected rainfall is over 16 inches below normal for the year. Mullinax stated he has never witnessed drought conditions like this anytime during his career at CU.

The dry weather has really affected CU's system. There has still been an increase in water use and demand, and the lack of rain has contributed to breaks in water lines and service lines. The ground has been extremely dry, and the cast iron mains become brittle and tend to snap and break. It has been an extremely challenging and difficult month for the crews, both during the day and throughout the night. Through the month, there were 40 water main breaks (35 of those were emergencies) and 19 service line breaks. As a comparison, last year at this time there were 8 main breaks and 14 service line breaks.

A graph comparing water demand usage in 2015 and 2016 was shown, as well as various pictures of breaks at Bradford Place Subdivision, Oakwood Subdivision and Whisperwood Trail. The break on Whisperwood Trail was reported at the last board meeting where road repairs in the amount of \$80,000 were approved. Talley Construction completed those road repairs and did a really good job.

The drought monitor map released on November 23, 2016, was reviewed, and Cleveland is currently in an area classified as an exceptional drought.

OLD BUSINESS

Presentation of Fiscal Year 2016 Audit Report

Mark Lay, representing Arnett, Kirksey, Kimsey, Sullivan, Lay & Hall, PLLC, reviewed the Required Auditors' Communications in relation to the 2016 audit report. He reported the financial statements present fairly, in all material respects, the respective financial position of the Division of the Board as of June 30, 2016 and 2015. There are 3 new supplemental schedules as part of the audit this year: Schedule of Bond Principal and Interest by Fiscal Year; Schedule of Note Principal and Interest by Fiscal Year; and Schedule of Officers. There will be a change in next year's audit report as a result of the Utility Board's action to establish and begin funding the Other Post-Employment Benefits (OPEB) Trust. Next year's audit will include a Statement of Fiduciary Net Position reporting the net value of assets held in the trust and a Statement of Changes in Fiduciary Net Position reporting the change in net position for the year. The assets held in the trust will help reduce the post-employment benefit payable liability currently reflected for the Electric & Water Divisions. Lay commended the board for taking action to begin funding the OPEB plan.

Board members were requested to review the 2016 audit report and contact Lay with any questions. Lay commended Stinnett and his staff for complete cooperation. Stinnett said, "We appreciate the partnership we have with this firm and the job they do for us every year."

Approval of Various Policies & Procedures

On motion by Vice Chairman Eddie Cartwright and seconded by Mayor Tom Rowland, the Board of Public Utilities voted to approve Policies addressing Bereavement (revised), Compensatory Time for Exempt Employees, Compensatory Time for Non-Exempt Employees, Education Recognition, Employee Testing & Certification, Overtime (revised), Vacation Leave and CU Vehicles. This is a continuation of CU's Strategic Plan, and the majority of these policies are an update to what CU has been practicing for a number of years.

NEW BUSINESS

Tennessee Backflow Prevention Award

CU was recognized by the Tennessee Backflow Prevention Association as the recipient of the 2016 Water Purveyor Award. This award was presented at the Annual Conference held in Chattanooga in October, and Gerald Elliott accepted the award on behalf of Cleveland Utilities.

Out of numerous water systems in the state of Tennessee, Cleveland Utilities was the only recipient in the state. Steve Barger said, "Gerald and I appreciate the support of our division leaders, Barry Maples and Craig Mullinax and the overall support of the company and the Utility Board for entrusting us to do our tasks." Barger personally thanked Elliott for his work in the cross connection program and making sure CU is compliant. Elliott handles the day-to-day duties for cross connection control including preparing customer letters for device testing, customer and plumbing contractor contact on CU's testing requirements, data entry of results, maintenance of contractor requirements, risk level inspections of facilities and properties to determine if a device is needed, device testing on irrigation systems and contractor verification, compliance and enforcement of CU's policy, etc. Barger's role is to provide resources, policy guidance and revision, assistance with policy compliance and ensure CU is complying with EPA or TDEC rules. The program is audited

through the Sanitary Survey and is an important part of maintaining the water system approval status. There is a potential of 39 points that can be deducted from the cross connection program, and CU has not had any point deductions in this area.

Comment by Chairman Aubrey Ector

At the close of the meeting, Chairman Ector interjected with a comment. "We have heard about difficulties due to multiple storm events and the ongoing drought. Once again, we want to say thank you for the performance under difficult conditions Mr. President/CEO, staff and employees of all divisions and levels."

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, January 5, 2017, 3:00 p.m.

Thursday, January 26, 2017, 3:00 p.m.

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

Amy Ensey
Utility Board Secretary

Aubrey Ector
Board Chairman

January 5, 2017
Date