

**MINUTES OF REGULAR MEETING**  
**CLEVELAND UTILITIES BOARD**  
**JANUARY 4, 2018**

*The Board of Public Utilities met at 3:00 p.m. at the Tom Wheeler Training Center.*

Present were the following: Eddie Cartwright, Vice Chairman (presiding as Acting Chairman in Chairman Aubrey Ector's absence); Tom Rowland, Mayor; Chari Buckner, Cleveland Utilities Board; Joe Cate, Cleveland Utilities Board; Tim Henderson, President/CEO; Amy Ensley, Utility Board Secretary; Walt Vineyard, Executive VP; Bart Borden, VP Electric Division; Craig Mullinax, VP Water and Wastewater; Marshall Stinnett, VP/CFO; Jan Runyon, Assistant VP Administrative Services; Dewayne Harris, Utility Fleet Foreman; and Larry Bowers & Brian Graves, *Cleveland Daily Banner*. Following the Pledge of Allegiance to the American Flag, Dewayne Harris delivered the invocation. Harris is a 19-year employee of CU and serves as the Utility Fleet Foreman in CU's Garage. James Milen and Jared Pomeroy also work in the garage area, and they are responsible for maintaining 114 vehicles, 72 pieces of equipment and trailers, 12 stationary generators and various other saws and apparatus. Henderson commended the garage personnel for their expertise and the work they perform.

**MINUTES OF DECEMBER 7, 2017**

On motion by Mayor Tom Rowland and seconded by Chari Buckner, the Board of Public Utilities voted to approve the December 7, 2017, minutes as written.

**MANAGER'S UPDATE AND ANNOUNCEMENTS**

**Offices Closed-Martin Luther King, Jr. Holiday**

Cleveland Utilities will be closed Monday, January 15, 2018, to observe the Martin Luther King, Jr. Day. Regular emergency and standby services will be maintained.

**Upcoming MTAS Board Training Reminder**

Board members were reminded of the upcoming MTAS Board Training being held at the Tom Wheeler Training Center. Module A is scheduled for Friday, January 19; Module B is Friday, February 2; and Module C on Friday, March 9.

**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 January 2014 through January 2018 was reviewed. For the month of January, the residential retail electric rate will change to 9.310 cents per kilowatt-hour, a decrease of 0.58 percent over December's rate of 9.364 cents. This rate change is driven by TVA's Fuel Cost Adjustment. As a continued trend, Cleveland Utilities will pass the TVA fuel cost rate adjustment to its consumers.
2. The November 2017 financial and statistical statements were presented to the Utility Board. During November, the cost of purchased power as a percentage of retail sales was 77.5 percent as compared to the budgeted percentage of 80.9 for FY 2018. The results for the month were electric sales revenue of \$7,293,790, which was offset by a purchased

power expense of \$5,651,131. This resulted in an operating margin of \$1,642,659. Operating expenses for the month were \$1,519,375 and can be compared to a budgeted operating expense of \$1,560,827. The division serviced 31,465 customers. The net income for the month was \$276,528, which is compared to a budgeted net loss of \$39,481.

3. For November 2017, water sales revenue was \$1,174,970. Other revenue sources contributed an additional \$98,175 for the month. The division serviced 31,653 customers. Operating expenses for November totaled \$1,230,616 and can be compared to the budgeted amount of \$1,226,078. The division recorded an operating income of \$42,529, compared to the budgeted operating income of \$40,937.
4. For November 2017, wastewater treatment revenue was \$1,021,494. Other revenue sources contributed an additional \$65,411 for the month. The division serviced 18,905 customers. Operating expenses were \$924,948. The division recorded an operating income of \$161,957, which is compared to a budgeted operating income of \$126,212.
5. The Prepay Program has been a tremendous success since implementation approximately a year and a half ago. The service charge of \$6.95 per month per customer will be reduced to \$6.00 per month per customer effective January 2018. These savings are attributed to efficiencies gained as a result of the number of customers enrolled in the program. Henderson advised as this program continues to grow, this fee will be evaluated and adjusted as necessary.

### **Electric Division**

Bart Borden reported on the following:

1. Construction began on the Harriman Road/Spring Branch Industrial Park Transmission Line project. Line construction crews began framing and setting combination transmission and distribution steel and concrete poles for the new lines.
2. In reference to the new overhead line for annexation of Freewill Road to 22<sup>nd</sup> Street, construction continued on the new line on 22<sup>nd</sup> Street and began on the line on New Murraytown Road. The 22<sup>nd</sup> Street line is 2,400 feet in length, and the New Murraytown Road line is 750 feet in length. These new lines will serve a new residential subdivision located on New Murraytown Road and future annexed properties in the area.
3. The Randolph Samples Road tie line project was completed at a total cost of \$83,443.86.
4. Favorable weather this fall has allowed the construction of the new Lake Forest Middle School building to progress well. CU construction crews installed a 500 kVA, 277/480 volt pad-mount transformer to serve the new classroom building. The gym and cafeteria will be served by an existing 1500 kVA pad-mount transformer, and the remaining existing buildings will be served from an existing transformer station location; however, it will be downsized from a 500 kVA to a 225 kVA pad-mount transformer. Crews will terminate the new customer owned underground services when they are installed by the electrical contractor at a later date.
5. Engineering and operations staff are working with Conley Electric and Bradley County personnel regarding upgrades to the electric service at the Bradley County Courthouse, which consists of the removal of four overhead type transformers from a basement electrical room. The upgrade will involve the installation of a concrete transformer pad and a new pad-mount transformer on the south side of the Courthouse. Conley Electric

will be installing new underground conductors and conduit to the existing electrical main panels of the Courthouse from the new transformer location. Cleveland Utilities' construction crews will replace the existing 33 year old underground primary conductors feeding the transformers. Construction work was agreed to start in December.

6. Engineering and operations personnel are working with Leidos Consulting Engineers to add a 69 kV bus protection breaker with differential relaying at East Cleveland 161/69 kV Substation. This work will be performed in conjunction with a TVA project to install new distance relaying to protect the Bulk Electric System assets owned and maintained by TVA. Presently, Cleveland Utilities' differential relay is protecting these Bulk Electric System assets, and the zone of protection will be relocated to only protect CU's power transformers and related bus. This will remove Cleveland Utilities from a Bulk Electric System NERC CIP-005 requirement and responsibility. It currently appears the work will occur in the fall of 2018 and be coordinated with the installation of the new transformers.
7. Line construction crews installed a 75 kVA pad-mount transformer, 230 feet of underground primary conductor and connected a customer owned temporary power pole for the construction of the new Cleveland Fire Hall #6 on Westland Drive.
8. Maintenance and equipment upgrades are underway at Fletcher Substation. CU's substation maintenance personnel and Operations Engineer worked to install a new Schweitzer Engineering Laboratories Real Time Automation Controller (referred to as a RTAC) and removed a Supervisory Control and Data Acquisition remote from service. The new RTAC is required to extend distribution automation into the field. Fletcher Substation and Mouse Creek Substation circuits will be the first to have this automation installed. Mouse Creek Substation is already equipped with the necessary equipment from a previous upgrade project. Additional work included the replacement of station batteries, drying the Load Tap Changer insulating oil and replacing sealing gaskets in both power transformers.
9. An update was presented on traffic lighting:
  - Engineering released a work order to install Wavetronix radar detection for the eastbound approach at Keith and 17<sup>th</sup> Streets NW. The work order adds to the existing radar already installed on Keith Street northbound and southbound. The eastbound and westbound approaches were also separated in the cabinet to phase 4 and 8. Previously, the side street approaches were both on phase 4, which limited the ability to provide unique programming.
  - Traffic Signal Coordinator Tad Bacon programmed eight ATC controllers and prepped eight Cisco Ethernet communication switches for installation along the 25<sup>th</sup> Street corridor from Peerless Road to the Spring Creek development and also at the Peerless Road and Raider Drive intersection. The existing Peek 3000E controllers will be removed and returned to stock. The serial modems were removed and will be retired or used for parts at other intersections. All of the new equipment was coded into the intelligent traffic IQ Central database and will provide more reliable clock synchronization and text alerts. This upgrade was necessitated due to numerous modem failures, which resulted in the corridor getting out of coordination. The new Ethernet communications is far more reliable in comparison.

10. Board member Chari Buckner asked if the electric system has hit any new peak demands. Borden advised an overall peak has not been reached, but a monthly peak was; however, it was not as high as was anticipated. Energy efficiency has made a big impact.

### **Water Division**

Craig Mullinax reported on the following:

1. A preconstruction conference will be held on January 11, 2018, for the flocculation and sedimentation basin improvements project at the Cleveland Filter Plant.
2. The Georgetown Road Water Storage Tank, Booster Pump Station and Water Main Extension project has started. Crom is onsite and has completed 5 percent of the water tank construction. Angel Construction is mobilized and will soon begin the construction of the water main and booster station.
3. Hampton Backhoe has completed the Craigmiles Street, Ridgeview Drive, and Cherokee Drive water main replacement project. Cleveland Utilities is awaiting the final invoice.
4. Hampton Backhoe has installed 2,100 feet of 6-inch water main on Savannah Avenue for the Savannah and Spring Street water main replacement project. Rock has been encountered, and equipment is being brought in for excavation. Once complete, installation of the line will resume.
5. The overflow pump station modifications project is 80 percent complete and anticipated to be finalized by the end of the month. The contractor is onsite and working, even with the frigid temperatures currently being experienced.
6. In reference to the 2010 annexation sewer project on APD 40, only one easement remains to be acquired, and Philip Luce is meeting with the property owner in the morning (January 5, 2018) to sign the easement document. Cleveland Utilities requested State Revolving Fund (SRF) funding for this project. A letter was received from the State of Tennessee SRF Loan Program advising that financial sufficiency approval was granted. The project will include two loans. The first loan of \$1,000,000 will include approximately \$100,000 of Principal Forgiveness, which will not have to be repaid. The second loan of \$350,500 will be a traditional loan with no Principal Forgiveness.
7. CTI Engineers is working on the design for the Sewage Pump Station to serve Olin and United Hydrogen. They are coordinating work on several items for the extension of the new line to the Wastewater Treatment Plant. One involves crossing some of Wacker's major lines going to the river. Additionally, the bridge crossing the waterway is going to be replaced, and the design of the new line will need to be coordinated with the new bridge design.
8. Rardin and Carroll Architects submitted the final plans for the interior improvements project to the maintenance office area, bunker room and breakroom in the CU Water and Wastewater Administration Building. CU approved the plans, and a bid date has been set for January 23, 2018.
9. An update was provided for the following development under construction:
  - Hampton Backhoe has completed 95 percent of both the water and sewer main installations for Fleeman Place on Foxfire Road. The development consists of four townhouse lots with 483 feet of 6-inch water main and 427 feet of 8-inch sewer main.

10. An update was provided for the ongoing Wastewater Rehabilitation project:
- In reference to the 2017 Rehabilitation Project, Basin 31-45 & 10-36, the contractor completed the rehabilitation of 7 manholes during this period. A total of 77 of the 102 manholes have been completed to date.
  - Work is progressing for Phase 2 of the 2017 Rehabilitation Project, Basin 31-45 & 10-36. The contractor completed 70 of the 143 service lateral rehabs and 5 of the 41 manhole rehabs during this period.
  - SRF funding was requested for Phase 1 of the Basin 10A-8 Rehabilitation & Basin 64-14A SSES Project. Final sufficiency approval was granted from the State of Tennessee SRF Loan Program in the amount of \$10 million for both basins. Basin 10A-8 was budgeted at \$7.5 million in FY 2018 & FY 2019, and Basin 64-14A was budgeted for \$2.5 million in FY 2019 & FY 2020.
11. The meter department set 18 meters through November 2017, compared to 25 for November 2016 and 18 for November 2015. Of the 18 meter sets, 11 were single-family homes, 2 were townhomes and 5 were duplexes.
12. The total amount of rainfall recorded at the Cleveland Filter Plant for 2017 was 52.04 inches (3.27 inches below normal).
13. With the extremely cold temperatures this week, Water Division personnel responded to a total of 54 calls during the period of January 1 to January 3 regarding either no water or broken water lines. 14 of the calls were during regular working hours and 40 were after hours. Henderson advised with the massive amount of telephone calls being received, the call center is working great.

#### **OLD BUSINESS**

##### **Approval and Acceptance of FY 2017 Audit Report**

On motion by Chari Buckner and seconded by Mayor Tom Rowland, the Board of Public Utilities voted unanimously to approve and accept the Fiscal Year 2017 audit report.

#### **NEW BUSINESS**

##### **Approval of Purchase Order with Haren Construction Company, Inc.**

On motion by Mayor Tom Rowland and seconded by Chari Buckner, the Board of Public Utilities voted to approve a purchase order to Haren Construction Company, Inc. in the amount of \$97,392 for the Cleveland Filter Plant Drainage Improvements Project. The project consists of the furnishing of all materials and installation of underground drainage piping and structures, modifications to building gutter system and construction of drainage ditch in accordance with contract requirements. This project is budgeted for FY 2017 in the amount of \$110,000.

##### **Approval of Purchase Order with Evoqua Water Technologies LLC**

On motion by Joe Cate and seconded by Chari Buckner, the Utility Board took action to approve a purchase order to Evoqua Water Technologies LLC in the amount of \$72,900 for replacement screens at the Cleveland Filter Plant Raw Water Pumping Station. The new screens will meet the requirements of TVA 26A permit. This project is budgeted for FY 2018 in the amount of \$125,000. The purchase is sole source.

##### **Approval of Purchase Order with Chemical Feed Systems, Inc.**

On motion by Mayor Tom Rowland and seconded by Joe Cate, the Board of Public Utilities voted to approve a purchase order to Chemical Feed Systems, Inc. in the amount of \$59,300 for the replacement of the original carbon feed system at the Cleveland Filter Plant. This project is budgeted for FY 2018 in the amount of \$55,000.

**Comments from Eddie Cartwright**

Vice Chairman Eddie Cartwright complimented the new pictures hanging in the Board Room of previous General Managers M.E. "Joe" Beavers, Tom Wheeler, and Ken Webb; current President/CEO Tim Henderson; along with a group photo of the current members of the Board of Public Utilities.

**Mayor Tom Rowland Retirement**

A press conference was held today at 11:00 a.m. where Mayor Rowland announced he is retiring. Cartwright said, "We will miss his steady hand at Cleveland City Hall. His hand was steady other places, in Nashville and even in Washington, D.C. Mr. Mayor, we will miss you."

**OTHER BUSINESS**

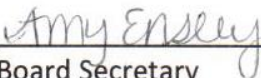
**Future Board Meeting Dates**


Discussion was held pertaining to the regular schedule of board meetings moving forward. Chairman Ector has a scheduling conflict which prevents him from being able to attend meetings on the fourth Thursday of each month at 3:00 p.m. for the foreseeable future. Until further notice, the normal schedule will move from the fourth Thursday of each month at 3:00 p.m. to the fourth Friday of each month at 12:30 p.m. Future board meeting dates at the Tom Wheeler Training Center are as follows:

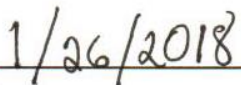
Friday, January 26, 2018, 12:30 p.m.

Friday, February 23, 2018, 12:30 p.m.

Friday, March 23, 2018, 12:30 p.m.

  
Board Secretary

  
Board Chairman

  
Date

**MINUTES OF REGULAR MEETING**  
**CLEVELAND UTILITIES BOARD**  
**JANUARY 26, 2018**

*The Board of Public Utilities met at 12:30 p.m. at the Tom Wheeler Training Center.*

Present were the following: Aubrey Ector, Chairman; Eddie Cartwright, Vice Chairman; Tom Rowland, Mayor; Chari Buckner, Cleveland Utilities Board; Joe Cate, Cleveland Utilities Board; Tim Henderson, President/CEO; Amy Ensley, Utility Board Secretary; Walt Vineyard, Executive VP; Bart Borden, VP Electric Division; Craig Mullinax, VP Water and Wastewater; Marshall Stinnett, VP/CFO; John Corum, VP Administrative Services; Jan Runyon, Assistant VP Administrative Services; Jamie Creekmore, Supervisor of Customer Relations; Andrew Hicks, Meter Setter; Joe Fivas, City Manager; and Brian Graves, *Cleveland Daily Banner*. Following the Pledge of Allegiance to the American Flag, Andrew Hicks delivered the invocation.

**MINUTES OF JANUARY 4, 2018**

On motion by Mayor Tom Rowland and seconded by Chari Buckner, the Board of Public Utilities voted to approve the January 4, 2018, minutes as written.

**MANAGER'S UPDATE AND ANNOUNCEMENTS**

**Offices Closed-Presidents' Day Holiday**

Cleveland Utilities will be closed Monday, February 19, 2018, to observe Presidents' Day. Regular emergency and standby services will be maintained.

**Annual Awards Luncheon**

Cleveland Utilities Annual Awards Banquet will be held on Wednesday, March 7, 2018, at 11:30 a.m. to honor employees with awards for years of service and perfect attendance. The banquet will be held in the Tom Wheeler Training Center. Board Members were invited to attend this event as these achievements are recognized.

**Appreciation to Utility Board Members**

Henderson expressed appreciation to board members for coming to the Ribbon Cutting Ceremony for the Call Center, as well as their support, leadership and embracing the vision of CU's staff.

**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 February 2014 through February 2018 was reviewed. For the month of February, the residential retail electric rate will change to 9.344 cents per kilowatt-hour, an increase of 0.37 percent over January's rate of 9.310 cents. This rate change is driven by TVA's Fuel Cost Adjustment. As a continued trend, Cleveland Utilities will pass the TVA fuel cost rate adjustment to its consumers.
2. The December 2017 financial and statistical statements were presented to the Utility Board. During December, the cost of purchased power as a percentage of retail sales was 77.2 percent as compared to the budgeted percentage of 80.9 for FY 2018. The results for the month were electric sales revenue of \$8,729,811, which was offset by a purchased

power expense of \$6,743,298. This resulted in an operating margin of \$1,986,513.

Operating expenses for the month were \$1,434,516 and can be compared to a budgeted operating expense of \$1,565,666. The division serviced 31,496 customers. The net income for the month was \$698,872, which is compared to a budgeted net income of \$87,794.

3. For December 2017, water sales revenue was \$1,121,609. Other revenue sources contributed an additional \$114,995 for the month. The division serviced 31,694 customers. Operating expenses for December totaled \$1,218,145 and can be compared to the budgeted amount of \$1,213,604. The division recorded an operating income of \$18,459 and can be compared to the budgeted operating loss of \$7,449.
4. For December 2017, wastewater treatment revenue was \$984,658. Other revenue sources contributed an additional \$154,561 for the month. The division serviced 18,962 customers. Operating expenses were \$942,330. The division recorded an operating income of \$196,889, which is compared to a budgeted operating income of \$96,956.

### **Electric Division**

Bart Borden reported on the following:

1. Work progressed on the Harriman Road/Spring Branch Industrial Park transmission line project. Line construction crews continued framing and setting combination transmission and distribution steel and concrete poles for the new lines. A total of 12 transmission poles have been set and framed. Two distribution only poles have been set and framed. Transmission conductors have been installed for four spans of the line. The extreme cold weather, along with hitting rock while drilling pole holes, have slowed the project somewhat.
2. In reference to the new overhead line for annexation of Freewill Road to 22<sup>nd</sup> Street, all new construction of the double circuit line on Freewill Road, New Murraytown Road and 22<sup>nd</sup> Street NW has been completed. The only items left are finishing removal of the old poles on 22<sup>nd</sup> Street NW and New Murraytown Road NW. This cannot be completed until Volunteer Energy Cooperative (VEC), AT&T and Charter transfer their lines and services to the new poles. They have been informed of the new line completion and are putting together a schedule to transfer their lines.
3. Engineering and operations personnel are working with Leidos Consulting Engineering firm of Hendersonville, TN, for the design work to install a new 69 kV bus breaker, structure, equipment and associated control circuits at East Cleveland 161/69 kV Substation. Requests for bids were sent out for the 69 kV breaker and have been received and are presently being evaluated.
4. Stone Creek Subdivision will be built in three phases with the first phase being only four lots along the road frontage of New Murraytown Road NW. When fully developed, it is expected to have 60 lots in the subdivision. In December, the developer poured the footers for the first four homes. CU will be installing two new transformers, underground primary and secondary lines to provide service to these new homes under construction. Provisions will also be made to provide service to the remaining portion of the subdivision. The preliminary design plan for the remainder of the subdivision will be completed this month.



5. CU's Electric Engineering Department was contacted by AT&T concerning conductor clearance issues in Rolling Brook Subdivision located off Michigan Avenue. This concern was evaluated, and it was determined 11 poles required changing out to taller structures to achieve the clearance required by the National Electric Safety Code. A work order was issued to replace the poles, and the total estimated cost of the job is \$85,930.05. All of the poles have been installed to date, but the electrical facilities were not transferred because the residential circuit was being combined with an industrial circuit due to a required maintenance issue at the East Cleveland 13 kV Distribution Substation with one of the power transformers. This has since been corrected, and work has begun.
6. AT&T changed out seven, 40-foot wood poles on Centenary Avenue NW to new 45-foot wood poles. The project is an upgrade to replace very aged pole structures. When notice is received from AT&T to transfer CU's facilities, line crew personnel will replace 3,006 feet of #2/0 copper primary and 531 feet of #6 copper neutral. Cleveland Utilities has requested AT&T to replace an additional 40-foot pole with a 45-foot pole in order for electric conductors to properly grade in the spans. The framing construction will be changed from a crossarm construction to narrow profile construction.
7. An update was given for the Tennessee Valley Authority (TVA)/Cleveland Utilities/Impact Cleveland/ClearResults Extreme Energy Makeover Project. In April of 2011, the TVA Board approved clean air agreements with the EPA, which supported TVA's vision for low-cost and cleaner energy. The Extreme Energy Makeover Project was one of the projects approved to meet these goals. The project met the requirements to lower greenhouse gases, provide economic stimulation and set up a greater avenue to partner with local power companies and quality contractors for the benefit of the Valley's electric customers. Cleveland Utilities, Impact Cleveland, United Way, the City of Cleveland and the Cleveland Housing Authority, with the assistance of ClearResults, submitted a very comprehensive proposal to TVA to be considered for the project. After several meetings and presentations with the TVA selection team, an Extreme Energy Makeover Project was awarded to Cleveland on September 1, 2015, in the amount of approximately \$3.7 million. Impact Cleveland took the local point position, with the assistance of ClearResults, and Cleveland Utilities began the process of education, application solicitation and evaluation with guidance from TVA. The project required a reduction in electric energy use by at least 25 percent in a home at least 20 years old and funded energy improvement items such as HVAC, insulation, lighting, air infiltration and appliances such as energy star refrigerators. Energy use education was emphasized and training was provided for each successful applicant. Throughout the project, the Cleveland team performed at the highest level and was awarded an additional \$1 million in funds, bringing the project total to \$4,748,200. The additional funds allowed 113 more homes to be included in the Cleveland project. This project was closed out in the fall of 2017 and the 2-page final report was received from TVA. The report was included in board folders. Results for the Cleveland Extreme Energy Makeover resulted in a \$4,710,849 spend to makeover 413 homes, averaging 68 years old, with a projected energy savings of 2,256,500 kWh, which is 5,464 kWh per home average annually. Based on last year's average rate, this equates to a \$547 annual savings in their energy bill. The pie chart shows the percentages of energy savings improvements that took place. Borden personally thanked TVA, Impact Cleveland (especially Dustin Tommy),

ClearResults, CU's TVA Quality Contractor Network and all the Cleveland Utilities' employees that poured their hearts out and into this project for CU customers. A brief video featuring the project was shown. Mayor Rowland and Chairman Aubrey Ector both added comments about the project being amazing and tremendous.

8. An update was presented on traffic lighting:
  - Last month, Borden reported on the equipment preparations for the traffic light controller upgrade project along the 25<sup>th</sup> Street corridor. Traffic Signal Coordinator Tad Bacon completed the installation of eight ATC controllers and Cisco communication switches in this traffic corridor. Seven were installed along 25<sup>th</sup> Street from Peerless Road to Spring Creek and one at the intersection of Peerless Road and Raider Drive. The addition of an Ethernet switch in the traffic cabinets also allowed several other devices to be connected to the communications network, including Opticom Preemption for emergency vehicles, EDI conflict monitors and Wavetronix Click 650 vehicle detection units.

### **Water Division**

Craig Mullinax reported on the following:

1. A significant electrical failure was experienced in the power and electrical feed servicing the North ICEAS Basins air valves at the Wastewater Treatment Plant. Staff made temporary repairs until the bid process could be completed to secure a contractor to make the permanent repairs. The project was advertised in the paper and bids were opened on January 4, 2018. Five bids were received and ranged in price from \$38,129 to \$58,753. EMEC submitted the low bid, and work is expected to begin next week.
2. A tentative notice to proceed was set for April 1, 2018, for the flocculation and sedimentation basin improvements project at the Cleveland Filter Plant (CFP). The contractor is waiting on material delivery dates before the notice to proceed date can be confirmed.
3. The materials for the screen replacements have been ordered for the raw water pump station project at the CFP.
4. W&O Construction is expected to begin work for the repair of Filter No. 2 at the CFP on Monday, January 29, 2018. The filter will be out of service during this time.
5. Materials are on order for the upgrade of the carbon feeder equipment project at the CFP.
6. Weather has slowed the progress on the Georgetown Road Water Storage Tank, Booster Pump Station and Water Main Extension project. Crom has completed 5 percent of the water tank construction, and Angel Construction has completed 5 percent of the construction of the water main and booster station.
7. The overflow pump station modifications project is 85 percent complete and all concrete structures have been poured. W&O Construction has done an excellent job on this project and even worked through some extremely cold weather.
8. In reference to the 2010 annexation sewer project on APD 40, the final plans and specifications have been sent to the State Revolving Fund (SRF) for review and approval. The easement acquisition process consisting of 25 easements is complete at a total cost of \$32,335. When SRF approval is granted, the request for bids will be advertised.

9. Bids were opened on January 23, 2018, for the interior improvements project to the maintenance office area, bunker room and breakroom in the CU Water and Wastewater Administration Building. Seven bids were received and ranged in price from \$30,400 to \$74,171. Wilder Contracting LLC submitted the low bid.
10. Engineering approved plans for the Heartland Subdivision (formerly Laurel Ridge Subdivision) on Tasso Lane. The development will consist of 73 lots and 2,352 feet of 8-inch water main and 2,885 feet of 8-inch sewer main. Talley Construction began work this week. CTP Properties is the developer.
11. An update was provided for the following development under construction:
  - Hampton Backhoe has completed 95 percent of both the water and sewer main installations for Eagle Creek, Phase 3, on North Mouse Creek Road. The development consists of 16 lots and 910 feet of 6-inch water main and 894 feet of 8-inch sewer main.
12. Total plan approvals for subdivisions/private developments constructed in 2017 comprise eight subdivisions and a senior center. This includes 190 lots, 9,375 feet of waterline and 4,614 feet of sewer line being added to CU's systems.
13. An update was provided for the ongoing Wastewater Rehabilitation project:
  - Work is progressing for Phase 2 of the 2017 Rehabilitation Project, Basin 31-45 & 10-36. The contractor completed 10 of the 143 service lateral rehabilitations and 5 of the 47 manhole rehabilitations during this period. A total of 80 service lateral rehabilitations and 10 manhole rehabilitations have been completed to date.
  - CU staff met with S&ME last week to finalize rehabilitation plans for Phase 1 of the Basin 10A-8 Rehabilitation and Basin 64-14A SSES project. S&ME is preparing bid documents and specifications. The SRF has approved all submittals, and CU held a public meeting on January 24. The loan is expected to be approved at the TLDA meeting in February. Bids for the rehabilitation project will be taken in March or April, as soon as the loan documents are finalized. S&ME has begun manhole inspections for the 64-14A SSES.
14. The meter department set 24 meters through December 2017, compared to 22 for December 2016 and 25 for December 2015. Of the 24 meter sets, 12 were single-family homes, 8 were townhomes, 1 was a duplex, 2 were apartments and 1 was commercial. A total of 150 meters have been set this fiscal year.
15. The total amount of rainfall recorded at the Cleveland Filter Plant as of January 22, 2018, was 0.88 inches and can be compared the monthly average of 4.98 inches.

## **NEW BUSINESS**

### **Approval of Purchase Order with Southeast Industrial Development Association (SEIDA)**

On motion by Mayor Tom Rowland and seconded by Chari Buckner, the Board of Public Utilities voted to approve a purchase order with Southeast Industrial Development Association (SEIDA) in the amount of \$50,978 for 2018 membership dues. SEIDA is a regional economic development association that partners with TVA and local power distributors. TVA reimburses CU for 50 percent of the purchase order amount.

### **Approval of Purchase Order with Scott Powerline**

On motion by Vice Chairman Eddie Cartwright and seconded by Joe Cate, the Utility Board took action to approve a purchase order to Scott Powerline in the amount of \$134,830 for a used, 2015 International 4300 Bucket Truck equipped with a Terex Hi-Ranger TC55 insulated aerial device. The unit will provide a working height of 60 feet and a side reach of 38.3 feet. There was a truck failure in CU's fleet, and this purchase needed to be expedited due to the long lead times associated with purchasing a new bucket truck. Therefore, the decision was made to buy a used truck. This was a rental unit in Scott Powerline's fleet. They submitted the low bid meeting all specifications. This is a budgeted item.

### **Approval of Purchase Order with Ditch Witch of Tennessee**

On motion by Chari Buckner and seconded by Mayor Tom Rowland, the Board of Public Utilities voted to approve a purchase order with Ditch Witch of Tennessee in the amount of \$199,887.33 for a Ditch Witch JT20XP Horizontal Directional Drilling Machine and associated equipment. This unit will replace a 2003 Ditch Witch Drill in which recent issues have been experienced and limited replacement parts are available. In researching a replacement, Electric Operations personnel considered the leading manufacturers in this line of equipment. The consensus of the group was to remain with the Ditch Witch brand for several reasons including, but not limited to, ease of use and maintenance, additional control features, gallons per minute flow rate availability and the only manufacturer to offer a separate engine for the mud mixer. The purchase is being made through the National Joint Powers Alliance (NJPA) contract.

### **Approval of Purchase Order with Premier Truck Group**

On motion by Vice Chairman Eddie Cartwright and seconded by Joe Cate, the Utility Board took action to approve a purchase order with Premier Truck Group in the amount of \$97,073.65 for the purchase of a new 2019 model dump truck for the Water Distribution Department. The new truck will replace a 2003 model dump truck, Unit 82. The dump truck is budgeted for FY 2018 in the amount of \$100,000.

### **Approval of an Engineering Services Agreement with Stantec Consulting Services**

On motion by Joe Cate and seconded by Mayor Tom Rowland, the Board of Public Utilities voted to approve an Engineering Services Agreement, Task Order No. 6, in the amount not-to-exceed \$207,070 with Stantec Consulting Services for engineering services related to the design and construction of water and sewer utility relocation for the widening of approximately three miles of State Route 60 (Georgetown Road) by the Tennessee Department of Transportation. These costs are reimbursable from TDOT. This is not a budgeted item.

## **OTHER BUSINESS**

### **Future Board Meeting Dates**

Future, regularly scheduled board meeting dates at the Tom Wheeler Training Center are as follows:

~~Friday, February 23, 2018, 12:30 p.m.~~ (was rescheduled to March 2)  
Friday, March 23, 2018, 12:30 p.m.  
Friday, April 27, 2018, 12:30 p.m.

Amy Ensley  
Board Secretary

[Signature]  
Board Chairman

March 2, 2018  
Date

**MINUTES OF REGULAR MEETING**  
**CLEVELAND UTILITIES BOARD**  
**MARCH 2, 2018**

*The Board of Public Utilities met at 12:30 p.m. at the Tom Wheeler Training Center.*

Present were the following: Aubrey Ector, Chairman; Eddie Cartwright, Vice Chairman; Tom Rowland, Mayor; Chari Buckner, Cleveland Utilities Board; Joe Cate, Cleveland Utilities Board; Tim Henderson, President/CEO; Amy Ensley, Utility Board Secretary; Walt Vineyard, Executive VP; Bart Borden, VP Electric Division; Craig Mullinax, VP Water and Wastewater; Marshall Stinnett, VP/CFO; John Corum, VP Administrative Services; Jan Runyon, Assistant VP Administrative Services; Nathan Vann, Safety Supervisor; and Brian Graves, *Cleveland Daily Banner*. Following the Pledge of Allegiance to the American Flag, Nathan Vann delivered the invocation.

**MINUTES OF JANUARY 26, 2018**

On motion by Mayor Tom Rowland and seconded by Chari Buckner, the Board of Public Utilities voted to approve the January 26, 2018, minutes as written.

**MANAGER'S UPDATE AND ANNOUNCEMENTS**

**Appreciation**

Henderson began by extending a heartfelt thanks and expressing appreciation to the entire CU family for the support and care he has received during this extremely difficult time of loss. He said, "Cleveland Utilities is a tremendous place to work and we are blessed."

**Tree Line USA Award**

CU was recognized as a Tree Line USA utility for the 18th consecutive year by the Arbor Day Foundation. A community tree planting event is scheduled for Saturday, March 10, at Tinsley Park.

**Awards Banquet Reminder**

The Annual Awards Banquet will be held on Wednesday, March 7, 2018, in the Tom Wheeler Training Center at 11:30 a.m. to honor employees with awards for years of service and perfect attendance.

**Upcoming Board Member Training**

Board members were reminded of the upcoming Module C Board Training scheduled for next Friday, March 9, beginning at 12:00 p.m. at the Tom Wheeler Training Center.

**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 2014 through March 2018 was reviewed. For the month of March, the residential retail electric rate will change to 9.693 cents per kilowatt-hour, an increase of 3.74 percent over February's rate of 9.344 cents. This rate change is driven by TVA's Fuel Cost Adjustment. As a continued trend, Cleveland Utilities will pass the TVA fuel cost rate adjustment to its consumers.
2. The January 2018 financial and statistical statements were presented to the Utility Board. During January, the cost of purchased power as a percentage of retail sales was 83.6

percent as compared to the budgeted percentage of 80.9 for FY 2018. The results for the month were electric sales revenue of \$9,761,058, which was offset by a purchased power expense of \$8,159,874. This resulted in an operating margin of \$1,601,184. Operating expenses for the month were \$1,501,428 and can be compared to a budgeted operating expense of \$1,565,666. The division serviced 31,600 customers. The net income for the month was \$257,424, which is compared to a budgeted net income of \$364,245.

3. For January 2018, water sales revenue was \$1,155,085. Other revenue sources contributed an additional \$113,557 for the month. The division serviced 31,731 customers. Operating expenses for January totaled \$1,242,650 and can be compared to the budgeted amount of \$1,222,696. The division recorded an operating income of \$25,992 and can be compared to the budgeted operating income of \$18,217.
4. For January 2018, wastewater treatment revenue was \$997,563. Other revenue sources contributed an additional \$68,555 for the month. The division serviced 18,965 customers. Operating expenses for the month were \$919,531. The division recorded an operating income of \$146,587, which is compared to a budgeted operating income of \$139,657.

### **Electric Division**

Bart Borden reported on the following:

1. Work is progressing nicely on the Harriman Road/Spring Branch Industrial Park transmission line project. Photos of some of the pole line structures were viewed. Line construction crews continued framing and setting combination transmission and distribution steel and concrete poles for the new lines. A total of twenty-four transmission poles and four distribution only poles have been set and framed. The rainy weather slowed the project somewhat.
2. In reference to the new overhead line for annexation of Freewill Road to 22<sup>nd</sup> Street, the final two Volunteer Energy Cooperative customers involved in the annexation of this area were switched over to Cleveland Utilities electric service during the month. The total project amount was \$497,331.85.
3. Engineering and operations staff continued to work with Leidos Consulting Engineering firm on the design to install a new 69 kV main bus breaker, structure, equipment and associated control circuits at East Cleveland 161/69 kV Substation. Bids were received for the 69 kV breaker, and the order was awarded to the low bidder, Utility Sales Agency of Franklin, TN, for a Siemens SF6, 72.5 kV, 3,000 amp rated breaker meeting CU's specifications. The manufacturer quoted an 18 week delivery, which will be early July. This project will be coordinated with the replacement of the three power transformers at the substation site.
4. Engineering is working with the City of Cleveland's contractor on the rebuild of the tennis courts at Tinsley Park. The existing courts are to be demolished and new courts constructed. The existing 480 volt court lighting will be reused. A new building will be constructed by the courts and will be served by a separate 120/240 volt service.
5. Cleveland Surveying completed the Stormwater Prevention Plan for the Harriman Road substation site. It was submitted to the City of Cleveland Site Review Team for feedback and anticipated approval.

6. An update was provided for the East Cleveland Substation power transformers. A considerable amount of work has been done by CU's engineering and operations staff in the evaluation of the transformer approval drawings. It was determined that additional winding temperature sensors and gauges were needed in the low voltage winding areas. This was an additional \$9,000 total adder to equip all three transformers and was recommended by CU's testing company, Liberty Power Service. Staff is presently working with the manufacturer on the arrangement of the radiator fans.
7. Two graphs comparing the January peak demands were reviewed. The first graph represented the system peak kilowatt demand with the corresponding temperature, whereas the second one showed the total kilowatt hours consumed in January and included the load factors.
8. Staff is presently in the process of upgrading to a Supervisory Control and Data Acquisition (SCADA) platform software package that runs on Red Hat Linux operating system. The newly purchased software is a 64-bit version of the existing package CU is currently running. The new Precision Real-Time Information System Manager (PRISM) can handle up to 100,000 field points and is 10 times faster in processing data than the previous version. The upgrade requires one SCADA master to be sent to Advanced Control Systems for the installation and ACS will upgrade the other onsite. The communication controllers for external devices are also being upgraded due to the existing unit being no longer supported by the package upgrade.
9. Administrative Services VP John Corum reported on a high voltage training CU line personnel recently conducted for the Cleveland Fire Department. CU is a member of the Job Training & Safety Program of Tennessee, and they have developed a high voltage Safety Demonstration Trailer. Last summer, CU employees Brandon Ingram, Barry Marshall and Zach Trew were certified in operating this unit. It is a valuable and effective tool that can be utilized to help educate various groups on the hazards associated with high voltage. The training was conducted over a three-day period to cover all shifts of the CFD, and approximately 85 firemen were in attendance. The training went great and was very well received. Corum commended employees Ingram, Marshall and Trew for their efforts in the preparation and delivery of this exercise. Corum said, "We are trying to develop and foster close partnerships with the Fire and Police Departments and do a lot of reciprocal training events to better serve this community." Several pictures were shown.
10. An update was presented on traffic lighting:
  - Engineering released a work order to split phase the side streets at Spring Place and Broomfield Road. The skewed intersection had proved to be difficult to maneuver from the side streets during high volume times. This new phasing operation will be safer without much impact on the efficiency of the intersection.
11. A number of site plans and plats were reviewed during the month. There were 9 commercial entities, 119 residential lots in subdivisions, 21 townhomes and 6 apartments. The plats and plans were available for viewing.

### **Water Division**

Craig Mullinax reported on the following:



1. W&O Construction began work for the headworks rehabilitation project at the Wastewater Treatment Plant (WWTP) on Monday, February 26.
2. EMEC began rewiring the North ICEAS Basins Air Valves at the WWTP on Monday, February 5.
3. Rardin & Carroll has been engaged to design plans for a new maintenance building at the WWTP. This is a much needed facility.
4. The flocculation and sedimentation basin improvements project at the Cleveland Filter Plant (CFP) is being delayed until the fall due to increasing water demand needed for the summer.
5. Haren Construction is scheduled to begin the drainage improvements project at the CFP on Monday, March 5.
6. The repair of Filter No. 2 at the CFP is nearing completion. The contractor is expected to be finished next week.
7. Work continues on the Georgetown Road Water Storage Tank, Booster Pump Station and Water Main Extension project. Crom has completed 15 percent of the water tank construction, and Angel Construction has completed 10 percent of the construction of the water main.
8. In reference to the Savannah Avenue and Spring Street water main replacement project, Hampton Backhoe has completed installation of the water line on Savannah Avenue. Five service line transfers remain to be installed.
9. CTI Engineers will be designing the Cherokee Gateway Boulevard Water Storage Tank to serve the Spring Branch Industrial Park. The contract amount of the project is \$48,500.
10. The overflow pump station modifications project is 95 percent complete with only cleanup work remaining. The following items were installed as part of the project: 1) construction of a new peak flow diversion structure with adjustable 5-foot weir gates that maximize the downstream flow to the WWTP; 2) renovation of Junction Box No. 1 to include an electronically operated sluice gate on the downstream wall to allow diversion of sewage during dry periods for pump testing; 3) installation of a new low flow 150 horsepower sewage pump in the existing wet well to pump small flows to the detention tank; and 4) renovation of the electrical and mechanical systems as required, including backup ventilation in case of air conditioner failure.
11. In reference to the 2010 annexation sewer project on APD 40, an email was received today from the State Revolving Fund (SRF) stating the loan package has been mailed. The requested loan amount is \$1,350,500.
12. CTI Engineers has submitted preliminary plans for the Sewage Pump Station to serve Olin and United Hydrogen. Engineering is currently reviewing those plans.
13. Bids were received for the demolition of the Old Chatata Creek Wastewater Pumping Station. Jennings Excavating submitted the low bid of \$14,250.
14. Wilder Contracting has completed approximately 30 percent of the interior improvements project to the maintenance office area, bunker room and breakroom in the CU Water and Wastewater Administration Building.
15. Engineering approved plans for Falcon Crest Phase 2 on Frontage Road. The development consists of 27 lots and 2,200 feet of 6-inch water main. Lake Mantooth is the developer.

Hampton Backhoe also began work during the month and has completed 95 percent of the project.

16. An update was provided for the following development under construction:

- Hampton Backhoe has completed the Fleeman Place project on Foxfire Road consisting of the installation of 483 feet of 6-inch water main and 427 feet of 8-inch sewer main.

17. An update was provided for the ongoing Wastewater Rehabilitation project:

- Work is progressing for Phase 2 of the 2017 Rehabilitation Project, Basin 31-45 & 10-36. The contractor completed 6 service lateral rehabilitations and 5 manhole rehabilitations during this period. Additionally, they have resumed work on lining and pipe bursting is continuing.

18. The meter department set 27 meters through January 2018. Of the 27 meter sets, 17 were single-family homes, 7 were townhomes, 2 were apartments and 1 was commercial.

19. The total amount of rainfall recorded at the Cleveland Filter Plant during the month of February was 7.63 inches. There was a total of 1.45 inches in January. A total of 3.20 inches of rainfall has been received over the past two days.

## **OLD BUSINESS**

### **Approval of Change Order with Wilder Contracting, LLC**

On motion by Vice Chairman Eddie Cartwright and seconded by Chari Buckner, the Board of Public Utilities voted to approve a change order with Wilder Contracting, LLC for the CU Maintenance Building Project in the amount of \$20,678.38. The original design called for concrete in the wash bay area surrounded by asphalt. After recommendation from the architect and careful consideration by Operations personnel, quotes were requested to replace the proposed asphalt with concrete due to the fact the entire area will be exposed to heavy equipment, oils, hydraulic fluid, etc. This would consist of 6 inches of concrete with a gravel base and welded wire reinforcing. The change order will increase the contract amount from \$406,478.93 to \$427,157.31.

## **NEW BUSINESS**

### **Safety Internal Performance Measures (IPM's)**

Administrative Services VP John Corum presented the Safety Internal Performance Measures (IPM's) for January 2017 through December 2017 as part of CU's Strategic Plan.

The overall results for 2017 are as follows:

- *OSHA Recordable Incident Rate* (a calculation for the number of employees per 100 full-time employees that have been involved in a recordable injury or illness) – a combined total of 4.04 for both divisions; 3.41 for the Electric Division; and 4.97 for the Water/Wastewater Divisions.
- *DART Rate* (a calculation for the number of recordable incidents per 100 full-time employees that results in lost or restricted days or job transfer due to work-related injuries or illnesses) – a combined total of 2.53 for both divisions; 1.7 for the Electric Division; 3.73 for the Water/Wastewater Divisions.

- *Lost-Time Case Rate* (a calculation describing the number of lost times cases per 100 full-time employees in any given time frame) – a combined total of 0.51 for both divisions; 0 for the Electric Division; 1.24 for the Water/Wastewater Divisions.
- *Vehicle Accident Rate* (a calculation for the number of accidents per million miles driven) – a combined total of 2.29 for both divisions; 0 for the Electric Division; 3.85 for the Water/Wastewater Divisions.

The following data went into the calculations:

- A total of 499,011 consecutive hours have been worked by both divisions combined without a lost-time injury (LTI). Electric Division employees contributed 485,569 of those hours, with the last lost-time injury occurring on November 19, 2015. The Water Division has reached 13,442 hours, with the last lost-time injury occurring on November 30, 2017.
- A total of 395,645 cumulative hours were worked company-wide in 2017. 114 employees in the Electric Division worked 234,820 hours, and 80 employees in the Water Division worked 160,825 hours.
- In addition, a total of 872,425 cumulative vehicle miles were driven by employees in 114 vehicles during the year. 353,351 miles were driven by Electric Division employees and 519,074 miles by Water Division employees.

The below table provides a comparison summary of the IPM data for the last four years:

<b>Year</b>	<b>OSHA – RIR</b>	<b>DART</b>	<b>LTCR</b>	<b>VAR</b>
2014	1.51	1.01	0	13.13
2015	3.51	2.01	0.5	6.84
2016	1.53	0.51	0	6.78
2017	4.04	2.53	0.51	2.29

Corum advised a considerable amount of time, effort and resources have been focused on reducing the Vehicle Accident Rate, and great strides have been made. Safety Supervisor Nathan Vann has been taking some coursework through the National Safety Council for defensive driving in hopes of implementing more training on this topic in the future to help reduce this rate even further.

#### **Approval of Purchase Order with Dell Computer Corporation**

On motion by Joe Cate and seconded by Mayor Tom Rowland, the Utility Board took action to approve a purchase order with Dell Computer Corporation in the amount of \$77,961.35 for a three-year renewal of the Microsoft Select Plus Software Agreement. This purchase is through a State of Tennessee Contract.

#### **Approval of Purchase Order with Gresham Smith and Partners**

On motion by Vice Chairman Eddie Cartwright and seconded by Mayor Tom Rowland, the Board of Public Utilities voted to approve a purchase order with Gresham Smith and Partners in the amount of \$69,200 for engineering services related to the electric utility facilities for the Tennessee Department of Transportation (TDOT) road widening project on Georgetown Road (SR60) from Westlake Drive to Eureka Road (SR306). These costs are reimbursable from TDOT.

**Approval of a Purchase Order with Shady Oaks Landscaping & Lawn Care**

On motion by Mayor Tom Rowland and seconded by Joe Cate, the Board of Public Utilities voted to approve a purchase order with Shady Oaks Landscaping & Lawn Care in the amount of \$59,198 for a two-year contract to mow the Water and Wastewater Division's properties located at the Cleveland Filter Plant, Wastewater Treatment Plant, Administration Building, sewer lift stations, water booster stations and water tanks. There are a total of 29 sites.

**OTHER BUSINESS**

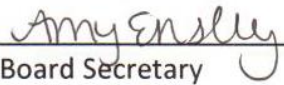
**Future Board Meeting Dates**

Future, regularly scheduled board meeting dates at the Tom Wheeler Training Center are as follows:

Friday, March 23, 2018, 12:30 p.m.

Friday, April 27, 2018, 12:30 p.m.

Friday, May 25, 2018, 12:30 p.m.

  
Board Secretary

  
Board Chairman

3-23-18  
Date

**MINUTES OF REGULAR MEETING**  
**CLEVELAND UTILITIES BOARD**  
**MARCH 23, 2018**

*The Board of Public Utilities met at 12:30 p.m. at the Tom Wheeler Training Center.*

Present were the following: Aubrey Ector, Chairman; Eddie Cartwright, Vice Chairman; Tom Rowland, Mayor; Chari Buckner, Cleveland Utilities Board; Joe Cate, Cleveland Utilities Board; Tim Henderson, President/CEO; Amy Ensley, Utility Board Secretary; Walt Vineyard, Executive VP; Bart Borden, VP Electric Division; Craig Mullinax, VP Water and Wastewater; Marshall Stinnett, VP/CFO; John Corum, VP Administrative Services; Jan Runyon, Assistant VP Administrative Services; Nathan Vann, Safety Supervisor; Jamie Creekmore, Customer Relations Supervisor; Kevin Martin, Field Service Technician; Joe Fivas, City Manager; Chris Mitchell, Owner of Chris Mitchell Management Consultants (CMMC); and Brian Graves, *Cleveland Daily Banner*. Following the Pledge of Allegiance to the American Flag, Kevin Martin delivered the invocation.

**MINUTES OF MARCH 2, 2018**

On motion by Mayor Tom Rowland and seconded by Chari Buckner, the Board of Public Utilities voted to approve the March 2, 2018, minutes as written.

**MANAGER'S UPDATE AND ANNOUNCEMENTS**

**Good Friday Holiday**

Cleveland Utilities will be closed Friday, March 30, 2018, to observe Good Friday. Regular emergency and standby services will be maintained.

**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 April 2014 through April 2018 was reviewed. For the month of April, the residential retail electric rate will change to 9.264 cents per kilowatt-hour, a decrease of 3.87 percent over March's rate of 9.693 cents. This rate change is driven by TVA's Fuel Cost Adjustment as well as the move to transition month rates. As a continued trend, Cleveland Utilities will pass the TVA fuel cost rate adjustment to its consumers.
2. The February 2018 financial and statistical statements were presented to the Utility Board. During February, the cost of purchased power as a percentage of retail sales was 79.3 percent as compared to the budgeted percentage of 80.9 for FY 2018. The results for the month were electric sales revenue of \$7,220,935, which was offset by a purchased power expense of \$5,723,678. This resulted in an operating margin of \$1,497,257. Operating expenses for the month were \$1,555,420 and can be compared to a budgeted operating expense of \$1,570,505. The division serviced 31,582 customers. The net income for the month was \$108,885, which is compared to a budgeted net income of \$346,824.
3. For February 2018, water sales revenue was \$1,128,802. Other revenue sources contributed an additional \$115,106 for the month. The division serviced 31,742 customers. Operating expenses for February totaled \$1,215,186 and can be compared to the budgeted

amount of \$1,225,332. The division recorded an operating income of \$28,722 and can be compared to the budgeted operating income of \$12,491.

4. For February 2018, wastewater treatment revenue was \$1,015,694. Other revenue sources contributed an additional \$81,603 for the month. The division serviced 18,977 customers. Operating expenses for the month were \$980,907. The division recorded an operating income of \$116,390, which is compared to a budgeted operating income of \$96,558.

### **Electric Division**

Bart Borden reported on the following:

1. An update was provided for the Harriman Road/Spring Branch Industrial Park Transmission Line Project. By the end of February, all of the transmission and distribution poles were set and framed. CU crews began the process of pulling in the 69 kV conductors.
2. The South Industrial Park Road Distribution Lines Project is in the design phase to install the two distribution circuits inside the industrial park. The PLS-CADD design is completed and the steel pole heights and classes have been determined. A total of 43 steel poles ranging from 70 feet to 40 feet in height are required for the project. A request for bids was submitted, and bids were received and evaluated. The purchase of these poles is an agenda item under new business in which board approval will be requested.
3. Engineering and operations staff are presently reviewing the specifications and drawings created by Leidos Consulting Engineers for the addition of the 69 kV bus breaker, switches, control wiring and relay panel additions at East Cleveland 161/69 kV Substation. Bids are being sent out today by Leidos and have a due date of April 10.
4. Staff has secured the deed to the Harriman Road property for the substation site. The grading and Stormwater Prevention Plan (SWPP) have been completed and went through the approval process by the City review team. Cleveland Utilities has requested Cleveland Surveying modify the SWPP to show the use of sediment filtering tubing instead of constructing sediment ponds. This change will require the grade work to be done during the summer months. It was determined better compaction levels will be achieved on the site during these months.
5. The Electric Engineering Department issued a work order for a contractor to install a 24-count fiber optic cable to the Crown Colony Water Tank. This connection from CU's main office to the water tank building will allow for much improved SCADA communications and truck radio reliability. The job includes 39 pole attachments and the installation of approximately 8,500 feet of ADSS fiber optic cable. The fiber will also be used for future communications needs along Georgetown Pike and will ultimately tie-in to CU's existing fiber coming over Paul Huff Parkway.
6. The replacement of the metal roof at the Harrison Building has been completed by Anderson Lumber Company. The roof was heavily damaged during the last major hail storm. All of the cleanup work from the project has been completed and full payment will be made after the architect conducts their final inspection and approval.
7. Safety Supervisor Nathan Vann displayed a Water-Jel Burn Kit recently purchased by CU after hearing from a guest speaker at January's Electric Safety Meeting. The speaker was a line worker employed by Huntsville Utilities who was involved in an incident and received

substantial burns. Had the utility not had these kits, the employee would've lost his hand and part of his arm. The kits include various combinations of dressings with no active ingredients that immediately cool the affected area and help prevent the heat from progressing deeper into the skin. CU purchased six kits to install on the line/bucket trucks and are available to employees exposed to the high hazard electrical. Borden and Vann both added they hope and pray these kits never have to be used, but certainly want to be prepared if an incident were to occur.

8. An update was presented on traffic lighting:
  - Traffic Signal Coordinator Tad Bacon collected cabinet data for the upcoming installation of Miovision's performance metric equipment. The pilot project is a City Engineering initiated project and will be installed on Paul Huff Parkway in the coming weeks to provide real-time data that can be used to adjust time-of-day and coordination settings in the traffic light controllers. The performance data can then be compared to the data from the former settings to see the impact on delay and other performance measures.
  - A work order was issued and traffic crews installed a 5-section left turn signal for the Ocoee Crossing westbound left turn movement onto Keith Street. This provides a protected arrow for the heavy demand movement from Ocoee Crossing and allows those vehicles to begin turning left before vehicles exiting the Woodcrest Subdivision are given a green signal. This addition of signalization will prevent conflicts reported and observed from aggressive driving behavior. CU is presently studying the intersection to see if minor adjustments are required to the signal timing, due to the additional signal.

### **Water Division**

Craig Mullinax reported on the following:

1. EMEC has completed the rewiring of the North ICEAS Basins Air Valves at the Wastewater Treatment Plant. The total contract amount of the project was \$38,129.
2. Haren Construction has completed 30 percent of the underground installation for the Drainage Improvements Project at the Cleveland Filter Plant (CFP).
3. The repair of Filter No. 2 at the CFP has been completed, and the filter is back in service and working well.
4. Work continues on the Georgetown Road Water Storage Tank, Booster Pump Station and Water Main Extension Project. Crom has completed 35 percent of the water tank construction, and Angel Construction has completed 50 percent of the construction of the water main.
5. In reference to the Savannah Avenue and Spring Street Water Main Replacement Project, Hampton Backhoe has completed installation of the water line on Savannah Avenue, and all of the service lines have been transferred to the new line. Cleanup is the only item remaining. Once complete, the contractor will begin work on Spring Street.
6. The tentative due date for plans and specifications for the Georgetown Road Utility Relocation Project is April 2019. TDOT will be funding the project.

7. On Wednesday, March 21, a significant 12-inch water main break occurred on Peerless Road just north of Ace Hardware. Unfortunately, several customers were without water for some time. Mullinax added his personnel will try to install valves and connect some lines at this location in case another event occurs so these customers won't lose water in the future. Mullinax commended his Operations Department personnel for their hard work. The City of Cleveland's Paving Department assisted with paving repairs. Overall, the project went very well, and the majority of the repairs were completed yesterday.
8. The Overflow Pump Station Modifications Project is 99 percent complete with only cleanup work remaining and seeding/strawing.
9. Engineering reviewed the preliminary plans and sent comments back to CTI Engineers for the sewage pump station to serve Olin and United Hydrogen. Additionally, preliminary plans were sent to Olin for their review.
10. Jennings Excavating is almost finished with the demolition of the Old Chatata Creek Wastewater Pumping Station.
11. Wilder Contracting has completed the majority of the Interior Improvements Project to the maintenance office area, bunker room and breakroom in the CU Water and Wastewater Administration Building. A few minor items remain in the project.
12. Engineering is reviewing the preliminary plans for 56 lots in Stone Creek, Phase 2, on New Murraytown Road. Dennis Epperson is the developer.
13. Engineering has approved plans for Freedom Hills on Old Charleston Road. The development will comprise 47 lots and 2,271 feet of 6-inch water main. Flint Hopper is the developer.
14. An update was provided for the ongoing Wastewater Rehabilitation Project:
  - Portland Utilities has completed 4,200 feet of mainline rehab and 35 service lateral rehabilitations during this period for the 2017 Rehabilitation Project, Basin 31-45 & 10-36.
  - Work is also progressing for Phase 2 of the 2017 Rehabilitation Project, Basin 31-45 & 10-36. The contractor completed 3,125 feet of mainline rehab (650 feet of which was pipe bursting) and 15 service lateral rehabilitations during this period.
  - Bids for Phase 1 of the Basin 10A-8 Rehabilitation & Basin 64-14A SSES Project will be advertised on March 26 and will be due on April 19. A letter dated March 15, 2018, was sent to Mayor Tom Rowland from TDEC notifying the City of Cleveland that Cleveland Utilities SRF loan request of \$10,000,000 had been presented to the Tennessee Local Development Authority (TLDA) Board on March 13, 2018, and was approved. The loan will have an interest rate of 1.58 percent with repayment over 20 years. From the \$10,000,000 loan, approximately \$8,000,000 is budgeted for FY 19 and \$2,000,000 in FY 20. All of the funds will be used for sanitary sewer rehabilitation.
15. The meter department set 23 meters through February 2018. Of the 23 meter sets, 19 were single-family homes, 2 were townhomes, 1 was irrigation and 1 was commercial. A total of 200 meters have been set this fiscal year.
16. The total amount of rainfall recorded at the Cleveland Filter Plant as of March 21, 2018, was 11.63 inches for the year-to-date.



## **NEW BUSINESS**

### **Presentation and Approval of Fiscal Year 2019 Budget**

President/CEO Tim Henderson opened the budget presentation by acknowledging and commending all employees throughout the organization involved in the budget process which takes a significant amount of time. VP/CFO Marshall Stinnett began the presentation by echoing Henderson's comments and thanking all employees for their input in the budget compilation. A comprehensive financial summary of the FY 2019 budget was then presented.

In the Electric Division, electric sales volume for fiscal year 2019 is projected at 1,033,314,826 kilowatt hours. Stinnett pointed out electric sales are not increasing at the rate they once did. There is growth in Cleveland, but with flat sales. Therefore, the customer number is increasing; however, the number of sales is not. This number is a slight decrease from 2018 and is projected because of the weather forecast in the previous year. Other projections in the Electric Division include a total revenue of \$102,947,341, expenditures of \$99,178,704 and a net income of \$3,768,637. Stinnett added the net income figure seems high in comparison to previous budgets; however, this is the result of changes in the Governmental Accounting Standards Board (GASB) guidance relating to the accounting of funds for the pension adjustment and Other Post-Employment Benefits (OPEB). Those cash expenditures are still there; they are just not reflected in the net income amount. Investment in new facilities is budgeted at \$9,658,000. An internal rate increase of 2.100 percent is being proposed, and Stinnett informed at this time last year, this percentage was expected to be 2.5 percent. He said, "We have brought in a number less than that. This is a testament to what the operations and engineering staff are doing in being as diligent with the funds as possible, especially considering the failure at East Cleveland Substation and having to replace the three transformers."

Board member Chari Buckner asked what the TVA rate change is going to be. Stinnett explained TVA has not yet determined what this percentage will be. TVA has proposed several changes for their October rate increase including a 1.5 percent increase across the board as they've done in previous years, but have also been discussing establishing a grid access charge. There have been negotiations over the past year and a half on the structuring of this charge. They have proposed reducing the standard energy rate by .01 per kWh and recovering the same amount in a fixed charge equivalent to each Local Power Company's (LPC's) purchases. TVA is expected to vote on the proposal at their May board meeting. Once this is approved, staff will then determine the best strategy for CU, and Chris Mitchell will be instrumental in helping determine what this will look like.

Stinnett then welcomed Chris Mitchell, and he highlighted the Cost of Service study and provided a more in-depth overview of the internal rate increase CU is recommending in electric effective July 1, 2018. The customer charge is the fixed portion of a bill; this amount is paid regardless of usage. In the residential class, the current customer charge is \$16.83, and the Cost of Service supports an increase of \$5.90. CU is proposing a \$2 increase in the customer charge and a 0.00200 kWh increase. Stinnett advised this would equate to an approximate \$4 monthly increase for the average residential customer. In the GSA 1 class, the current customer charge is \$17.41, and the Cost of Service supports an increase of \$6.92. CU is recommending a \$2 increase in the customer

charge and a 0.00200 kWh increase. For the GSA2 class, the current customer charge is \$51.82, and the Cost of Service supports an increase of \$9.50. CU is recommending an increase of \$9 in the customer charge and a 1.00 KW increase. In the GSA3 class, the current customer charge is \$195.66, and the Cost of Service supports an increase of \$28.92; however, CU is not recommending any changes to this class at this time.

Stinnett resumed and proceeded with the remaining budget summary. In the Water Division, water sales volume is projected at 2,925,031,890 gallons and total revenues are forecast at \$16,548,841. Expenses for the new year are budgeted at \$15,657,294. Fiscal year 2019 reflects a net income of \$891,547 in water. Investment in new facilities is forecast at \$5,914,723. There are no internal rate increases projected in the Water Division; however, there is a proposed 1.13 percent pass-thru increase from Hiwassee Utilities Commission (this number will get adjusted if HUC adjusts their increase).

In the Sewer Division, wastewater sales volume is projected at 1,961,273,718 gallons and total revenues are forecast at \$13,423,472. Expenses for the new budget year are budgeted at \$12,179,914. Other projections in sewer include a net income of \$1,243,558 and an investment in new facilities of \$14,579,244. A large portion of this amount is related to SRF funding just received and capital projects spanning between FY 18 and FY 19. There are no projected rate increases for wastewater services. Stinnett pointed out at this time last year, projections included a rate increase of 4 percent for wastewater in the FY 19 budget, but this has been postponed until FY 2020. This decision resulted in part from customer growth exceeding expectations over the 2018 fiscal year, as well as some of the capital projects in wastewater not reaching the point staff thought they would be at this time last year. Therefore, the rate increase is being postponed. Stinnett advised management doesn't want to ask for a rate increase when it's not necessary.

Debt at the beginning of FY 2019 is expected to be \$13,505,551 in electric, \$29,305,413 in water and \$21,644,551 in sewer. New debt is forecast in the amounts of \$2,500,000 for electric, \$5,413,083 for water and \$12,152,726 for sewer. The majority of this figure in water and sewer is from SRF funding. Payments made on the existing debt will total \$1,119,003 for electric, \$2,234,399 for water and \$1,825,392 for sewer. Debt at the end of 2019 is forecast at \$14,886,548 for electric, \$32,484,098 for water and \$31,971,885 for sewer.

In the fiscal year 2019 budget, the number of budgeted equivalent employees is projected at 202, compared to 197 for 2018. The increase in employees is attributed to the opening of the Call Center along with other projects being proposed for FY 19 in the customer service arena. Also, the proposed budget includes a 3.5 percent merit increase for eligible employees with a successful performance evaluation. Total payroll for 2019 is calculated to be \$14,565,161.

Stinnett then reviewed graphs representing bond coverage for years 2018 to 2028. All years projected for electric, water and sewer are above the mark of 1.25 for most rating agencies and CU's conservative estimate of 1.40. Tax equivalent payments from the Electric Division to the General Fund of the City of Cleveland are expected to be \$2,211,629 in fiscal year 2019. As a comparison, this payment was just over \$1 million in fiscal year 2000.

Electric Division VP Bart Borden reviewed capital projects in the proposed 2019 budget totaling \$9.658 million. Borden pointed out the categories for commercial load additions, industrial load additions, residential (overhead and underground) and street lighting are budgeted based on trending history. One of the major items for the Electric Division includes the purchase of two 55-foot bucket truck replacements (units 118 and 179) budgeted at \$230,000 each for a total amount of \$460,000. Units 118 and 179 are both 2007 model bucket trucks with working heights of 60 feet. Unit 118 has 64,766 miles and 11,654 hours, whereas unit 179 has 53,112 miles and 12,773 hours. These trucks sit and idle a great deal of time, and the number of hours must be taken into consideration. CU takes really good care of these trucks to extend the life as much as possible. By the time these buckets get replaced, they will be around 12 years old. The lead times associated with these type truck purchases are long, typically around a year and a half from the beginning of the purchase process to delivery.

Another key project in electric includes the two, three-phase distribution lines for the South Industrial Park Phase III budgeted at \$460,000. This project was featured in Borden's electric report, and the poles are an agenda item under new business. The total project consists of 6,300 linear feet of overhead lines and 43 steel poles. Borden noted there is quite a bit of curvature in the roadway that created some real challenges in the design of the line. There are some very steep angles which will require double poles in certain areas. These poles are a heavy class and costly. As a comparison and to provide a better understanding of the substantial expense that would be involved to install the lines underground, a quick estimate was calculated, and it was \$6.453 million.

The electric budget also includes the purchase and installation of the three power transformers to replace the existing 1956 model transformers at the East Cleveland Primary Substation, budgeted at \$1.7 million. This project is scheduled for October. As previously communicated, there was a failure on the c phase unit in May 2017. The last key project is the site plan and Phase I of the South Industrial Park Substation budgeted in the amount of \$1.0 million. The substation site is adjacent to the industrial park. The two north distribution circuits will serve the commercial area, whereas the two south circuits will serve the industrial park. It will provide a great deal of reliability.

Water and Wastewater VP Craig Mullinax highlighted water capital projects in the proposed 2019 budget totaling \$5,554,183. Mullinax stated CU will make every attempt to fund large capital projects (both water and wastewater) through the SRF. One of the key items in engineering is the Cherokee Gateway Water Storage Tank budgeted at \$850,000. This project is for the construction of a 500,000 gallon water storage tank to serve the Spring Branch Industrial Park and the surrounding area. Also included in engineering is the upgrade of the Dempsey Circle Water Booster Station in the amount \$425,000. The existing Dempsey Street Water Booster Pumping Station has been in service since 1989 and consists of two pumps rated at 500 GPM and 1100 GPM. It was originally installed to be a temporary water booster station but has remained in service. The upgrade will consist of three pumps rated at 2,100 GPM each with variable drives. The new pumps will allow CU to fill the Bryant Drive Tank from the Dempsey Station alone and will

be able to provide fire protection to the industrial park. It will also provide redundancy with two standalone stations that can serve the Bryant Drive Tank. Another major item under engineering is the the Georgetown Road Water & Sewer Relocation Design budgeted at \$105,000. The project costs will be paid by TDOT and are estimated at \$1,630,000. The last key item in engineering is galvanized water line replacements in the budgeted amount of \$300,000.

Major capital projects at the Cleveland Filter Plant include flocculation and sedimentation basin improvements, \$1,100,000; and filter upgrades in the amount of \$333,333. The flocculation and sedimentation basin improvements consist of the construction of 16, 20 and 24-inch ductile iron plant and yard piping; magnetic flow meter in below-grade precast concrete vaults, flocculation and sedimentation basins improvements including fiberglass reinforced plastic baffles, effluent launder troughs and weir, lighting improvements and installation of a new raw water pumped diffusion flash mix system. The CFP Filter Upgrades Project consists of the upgrade of four of the six filters which will include concrete coating, underdrain rehabilitation and replacement of the filter media. Two of the filters have already been upgraded. Filter No. 1 was completed in 2006 and Filter No. 2 just recently. Filter 1 and 2 were rehabilitated due to a failure in the underdrain system. CU is currently evaluating upgrading all six filters from a surface wash system to an air scour system used in backwashing the filters. The two filters which have already been rehabilitated were constructed in 1954; the other four filters were constructed in 1961.

Key projects in wastewater were then reviewed by Mullinax. Capital requirements for the wastewater division in the proposed fiscal year 2019 budget total \$14,301,405. One of the major items in engineering includes sewer improvements in the annexation areas. Mullinax pointed out that CU has up to eight years to serve the annexed areas with water and sewer. The 2010 Annexation Project includes the region north and south of APD-40 between South Lee Highway and Exit 20 and is budgeted at \$1,200,000. It consists of approximately 9,100 feet of 8-inch gravity sewer, 54 manholes and 3,400 feet of 2-inch force main to serve around 60 properties. The 2010/2012 annexation sewer improvements in the Benton Pike and Durkee Road area includes 8,940 feet of 8-inch gravity sewer and 36 manholes to serve approximately 50 properties and is budgeted in the amount of \$1,500,000. Funding for both of the aforementioned annexation projects are through the SRF. The last key item in engineering is the new sewer lift station to serve the Olin Corporation budgeted at \$400,000. Details of the project include the construction of a 130 GPM sewage pump station and approximately 5,728 feet of 4-inch force main to serve the property of the Olin Mathieson Corporation, United Hydrogen and Lonza. The design is being funded by the Cleveland/Bradley County Industrial Development Authority, and the construction will be funded by the Olin Mathieson Corporation.

Major budgetary items in wastewater collections-SCOPE 10 are the ongoing Sewer Rehabilitation Projects. CU has recently obtained another SRF loan of \$10,000,000 to perform rehabilitative work in Basins 10A-8 (Tinsley Park to Inman Street) and 64-14A. This funding is expected to be utilized to perform two phases of rehabilitation in Basin 10A-8 at a total cost of \$7,193,405 (Phase 1 is budgeted in the amount of \$4,350,000 and Phase 2 at \$2,843,405) and a SSES investigation in Basin 64-14A, as well as a phase of rehabilitation in Basin 64-14A at a cost of \$600,000. The SSES work in Basin 64-14A is ongoing and should be completed this year. The first phase of

rehabilitation work in Basin 10A-8 should bid in April 2018 and begin construction in June 2018. This project is expected to take approximately one year to complete.

President/CEO Henderson added the executive group and the entire CU team did an incredible job with this budget. He said, "We had hoped to reduce the electric rate increase even further; but the replacement of the transformers prevented that. The delay of the rate increase in sewer was the responsible choice when we did not feel like it was necessary. It's what a public utility should do. This proposed budget is certainly a true picture of where we need to be. The team has done a good job of planning for the future to make sure we are tracking in the right direction. Support from Chris Mitchell's group makes a huge difference and gives confidence to know we are doing the right thing with our numbers." Mitchell represents 72 utilities in the Valley.

On recommendation by Tim Henderson, Vice Chairman Eddie Cartwright motioned and Mayor Tom Rowland seconded for the Utility Board to approve the proposed fiscal year 2019 budget as presented. The Board of Public Utilities voted and the motion carried unanimously. The proposed 2019 budget will now be presented to the Cleveland City Council at the Budget Retreat on Monday, April 9, 2018.

**Approval of Purchase Order with Elster**

On motion by Mayor Tom Rowland and seconded by Chari Buckner, the Utility Board took action to approve a purchase order with Elster in the amount of \$83,285 for renewal of the AMI annual software maintenance agreement. This is a sole source purchase.

**Approval of Purchase Order with CHM Industries, Inc.**

On motion by Joe Cate and seconded by Vice Chairman Eddie Cartwright, the Board of Public Utilities voted unanimously to approve a purchase order with CHM Industries, Inc. in the amount of \$92,037.25 for 43 galvanized steel poles ranging in heights of 40 feet to 70 feet. The poles are to be used for the distribution line into the Spring Branch Industrial Park. CHM Industries submitted the low bid.

**Approval of a Purchase Order with KMS Electrical Products**

On motion by Mayor Tom Rowland and seconded by Chari Buckner, the Board of Public Utilities voted unanimously to approve a purchase order with KMS Electrical Products in the amount of \$84,250.64 for 54 ductile iron poles ranging in heights of 45 feet to 55 feet to replenish stock. The pole order is a mixture of gray acrylic finish and weathered finish. KMS Electrical Products submitted the low bid. The life expectancy of these poles is estimated at 50 to 60 years.

**Approval of Green Power Provider Fees**

On motion by Joe Cate and seconded by Vice Chairman Eddie Cartwright, the Utility Board took action to unanimously approve new Green Power Provider fees for customers electing to participate in Cleveland Utilities' and TVA's solar generation program. TVA is no longer funding the installation of solar metering. The submitted costs reflect the average charges to cover CU's costs in providing metering, billing and meter replacement for the installation and ongoing expenses. These fees will be reviewed annually and adjusted as required.

**Approval of a Purchase Order with Dycho Chemical Company**

On motion by Mayor Tom Rowland and seconded by Vice Chairman Eddie Cartwright, the Board of Public Utilities voted unanimously to approve a purchase order with Dycho Chemical Company in

the amount of \$61,600 for the annual supply of corrosion control inhibitor for the Cleveland Filter Plant. The purchase is sole source, and the chemical is budgeted for FY 2018.

**Approval of an Agreement and Memorandum**

On motion by Vice Chairman Eddie Cartwright and seconded by Mayor Tom Rowland, the Utility Board took action to approve an Agreement and Memorandum of Second Amendment to Option and Lease Agreement and Second Amendment to Option and Lease Agreement between Cleveland Utilities, the City of Cleveland, and New Cingular Wireless PCS, LLC. This is a second amendment to the original Lease Agreement dated August 26, 1997, and the first amendment dated June 5, 2008, to lease property on the site of Cleveland Utilities' Weeks Road Water Storage Tank for a cell tower and equipment.

**OTHER BUSINESS**

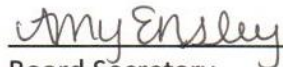
**Future Board Meeting Dates**

Future, regularly scheduled board meeting dates at the Tom Wheeler Training Center are as follows:

Friday, April 27, 2018, 12:30 p.m.

Friday, May 25, 2018, 12:30 p.m.

Friday, June 22, 2018, 12:30 p.m.

  
Board Secretary

  
Board Chairman

4-27-18  
Date

**MINUTES OF REGULAR MEETING**  
**CLEVELAND UTILITIES BOARD**  
**APRIL 27, 2018**

*The Board of Public Utilities met at 12:30 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; Tim Henderson, President/CEO; Amy Ensley, Utility Board Secretary; Walt Vineyard, Executive VP; Bart Borden, VP Electric Division; Craig Mullinax, VP Water and Wastewater; Marshall Stinnett, VP/CFO; Jan Runyon, Assistant VP Administrative Services; Kenny Longley, Electric Engineer II; David Yost, GIS Director; Joe Fivas, City Manager; and Brian Graves, *Cleveland Daily Banner*. Following the Pledge of Allegiance to the American Flag, Kenny Longley delivered the invocation.

**MINUTES OF MARCH 23, 2018**

On motion by Mayor Tom Rowland and seconded by Vice Chairman Eddie Cartwright, the Board of Public Utilities voted to approve the March 23, 2018, minutes as written.

**MANAGER'S UPDATE AND ANNOUNCEMENTS**

**Exterior Building Façade Renovation Update**

President/CEO Henderson introduced GIS Director David Yost and advised he is part of a committee that was formed in 2017 for the Exterior Building Renovation Project that has been meeting regularly to give input on the direction of this project. Additionally, Yost will be playing a lead role managing the construction component once underway.

Yost reported on the progress to date as well as the plans moving forward. The primary focus will include a main focal tower (stone), staining of the existing brick, stone column accents, parapet panel replacement across the front of the building, the addition of wayfinding signage, a new digital sign and drive surfacing for a renewed look. This theme would carry out through the entire campus in different phases. The Lewis Group Architects completed the design, the request for bids was issued, and bids were opened on April 5, 2018. Three bids were received and ranged in price from \$1,039,000 to \$1,219,968, which was above the budgeted project amount.

Adjustments were then made to some of the items resulting in a price reduction of approximately \$366,000 and fit within the budgeted amount. CU is awaiting the final adjusted prints and will then seek board approval when details are finalized. Once approval is obtained, the construction will commence. The first phase is expected to take six to nine months to complete. Prints of the rendering and digital sign were displayed. Henderson said, "Our staff is excited about the new look. This is a conservative approach to making a great improvement to our facilities and the community."

**Budget Approval Process Update**

The budget approval process continues to move forward. On April 23, 2018, the Cleveland City Council passed the first reading of the fiscal year 2019 budget.

**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 May 2014 through May 2018 was reviewed. For the month of May, the residential retail electric rate will change to 9.193 cents per kilowatt-hour, a decrease of 0.77 percent over April's rate of 9.264 cents. This rate change is driven by TVA's Fuel Cost Adjustment. As a continued trend, Cleveland Utilities will pass the TVA fuel cost rate adjustment to its consumers.
2. The March 2018 financial and statistical statements were presented to the Utility Board. During March, the cost of purchased power as a percentage of retail sales was 77.1 percent. The results for the month were electric sales revenue of \$8,058,881, which was offset by a purchased power expense of \$6,216,213. This resulted in an operating margin of \$1,842,668. Operating expenses for the month were \$1,571,260 and can be compared to a budgeted operating expense of \$1,575,343. The division serviced 31,659 customers. The net income for the month was \$442,972, which is compared to a budgeted net income of \$114,196.
3. For March 2018, water sales revenue was \$1,047,683. Other revenue sources contributed an additional \$135,213 for the month. The division serviced 31,817 customers. Operating expenses for March totaled \$1,273,570 and can be compared to the budgeted amount of \$1,222,797. The division recorded an operating loss of \$90,674 and can be compared to the budgeted operating loss of \$7,834.
4. For March 2018, wastewater treatment revenue was \$950,766. Other revenue sources contributed an additional \$93,986 for the month. The division serviced 19,020 customers. Operating expenses for the month were \$997,013. The division recorded an operating income of \$47,739, which is compared to a budgeted operating income of \$104,843.
5. Stinnett noted the Electric Division was over budget for the month and is a result of the weather during the month. March is typically a transition month; however, there were several warm days and several cold days at the end of the month. The Water and Wastewater Divisions were both under budget. This is attributed to the amount of rainfall receiving during the month.

### **Electric Division**

Bart Borden reported on the following:

1. During the month of March, 17 transmission and distribution combination poles were set and framed for the Harriman Road/Spring Branch Industrial Park Transmission Line Project. CU crews pulled in all of the 795 MCM 69 kV conductors, sagged the conductors to proper tensions and tied it in to the insulators.
2. In reference to the South Industrial Park Road Distribution Lines Project, the 13 kV steel distribution poles were placed on order and have a quoted delivery of June 6 to June 20.
3. Bids were received for the East Cleveland 69 kV bus breaker addition. The project was awarded to low bidder, Substation Engineering and Design Corporation, located in Pelham, Alabama, at a cost of \$30,878 for the required substation structure and equipment to install a 69 kV main bus breaker. The structure and equipment are quoted for an August 21, 2018, delivery date. The bus breaker was awarded to low bidder, Siemens Industry Inc., at a cost of \$35,450 with a mid-June delivery date.



4. Engineering and operations staff have been working with the site design engineer concerning the entrance to the proposed Graystan Square Development on Paul Huff Parkway at Mouse Creek Road. The entrance will be a right and left in and right out only entrance and will occupy a good portion of the existing location of the Valleyhead Substation driveway. CU personnel are working closely with the design engineer to ensure the driveway modification to the substation will allow a large, lowboy semi-truck and crane access to both sides of the substation in the event a power transformer needs to be replaced. This requirement has created some challenges for the design engineer due to the grade changes, and the final design has not been determined to date. CU's Traffic Signal Technician is also working with the developer and the City of Cleveland on the proposed Mouse Creek Road and Paul Huff Parkway intersection modifications on the impact it will have on the traffic signals.
5. The Electric Operations Department is working with the City of Cleveland Engineering Department to upgrade the stormwater pipe system crossing the CU Power Service Center lower equipment storage lot. The City Engineering Department is designing the system, and Cleveland Utilities will be responsible for the installation. Borden expressed appreciation for the City's assistance with the project. Cleveland Utilities will incorporate additional drainage to capture runoff from the rear parking lot areas. This will be a great improvement in stormwater control.
6. Employees from differing areas attended a Changing Marketplace Workshop hosted by TVA at the Tom Wheeler Training Center to help educate them on how the electric marketplace is changing with solar and wind generation, electric vehicles, battery storage and energy control systems integration. The workshop was very helpful for employees who do not normally deal with these systems.
7. The Electric Standby Supervisors participated in a TVA Emergency Load Curtailment drill on March 22, 2018. This biannual emergency drill prepares TVA and Local Power Companies in the processes to curtail loads during abnormally high demand conditions. The drill went very well.
8. The Operations Department received the new Ditch Witch Directional Boring Machine and crews participated in training of the proper use and operation of the new equipment. The boring machine is used regularly to bore in electrical conduits, but the department frequently assists the Water Division with the installation of water lines under roadways.
9. An update was presented on traffic lighting:
  - A work order was issued to convert 12 incandescent traffic signal heads to LED at the intersection of Stuart Road and Old Tasso Road. When this work is completed, only five intersections will remain with incandescent bulbs in the signals.
  - Due to the annexation of the Westland Drive and APD-40 intersection, the ownership of the traffic signals has changed from Bradley County to Cleveland Utilities. Any future maintenance will be charged to the City of Cleveland. This brings the total number of intersections in the city to 76.

### **Water Division**

Craig Mullinax reported on the following:

1. The Headworks Rehabilitation Project at the Wastewater Treatment Plant (WWTP) is approximately 75 percent complete. Three new bar screens and new technology have been put in the channel. The new screen size is much smaller than the existing screens and will allow for more solids to be caught in the wastewater influent coming into the plant.
2. Rardin & Carroll has completed the design for the New Maintenance Building Project at the WWTP. A bid date has been set for May 17, 2018.
3. The design for the Backwash Return Pit Rehabilitation Project at the Cleveland Filter Plant (CFP) is complete; however, the project is being delayed until FY 2020 due to operational concerns along with additional work that will be required due to the pouring of the large concrete pad and the time it would take to cure.
4. W&O Construction has completed the repair of Filter No. 2 at the CFP at a total cost of \$121,023.
5. The Georgetown Road Water Storage Tank, Booster Pump Station and Water Main Extension Project is progressing. Pictures of various stages of the tank construction were shown. The water tank is 41 feet in diameter and 50 feet in height. Currently, CU has a connection and purchases water from Savannah Valley Utility District. Once the tank is in service, Cleveland Utilities will keep the connection, but will no longer purchase water from the utility. The tank construction is anticipated to be completed in the early fall.
6. The Baugh Springs Trail & Banther Road Water Main Extension Projects will consist of 3,392 feet of 6-inch water main. The projects were requested by a customer and will include participation by the County.
7. Two new projects which are part of the new basin supported by the Georgetown Road Water Storage Tank being constructed will include the replacement of 3,674 feet of 8-inch water main on Van Davis Road (SR60 to Swafford Cemetery Road) as well as the extension of 2,700 feet of 6-inch water main on Van Davis Road south of Morgan Road.
8. The formal application for the 2010 Annexation Sewer Project on APD 40 was submitted to the State Revolving Fund (SRF) this week by Philip Luce. Once the application is reviewed by the SRF, it will then be sent to the Tennessee Local Development Authority (TLDA) Board which meets in mid-May for approval.
9. Olin representatives will be meeting to discuss the sewage pump station to serve Olin and United Hydrogen. The design was funded by the Cleveland/Bradley County Industrial Development Authority. Mullinax is hopeful Olin will proceed with the project.
10. Updates were provided for the following developments under construction:
  - Hampton Backhoe has completed all the work associated with Stonebriar Subdivision and Eagle Creek, Phase 3. Additionally, Hampton Backhoe has completed 99 percent of the water main for Phase 2 of Falcon Crest, 10 percent of the water booster pump station installation for Falcon Crest and 90 percent of the sewer main for Phase 1 of Stone Creek.
  - Talley Construction has completed 50 percent of the sewer main for the Heartland Subdivision (formerly Laurel Ridge Subdivision).
11. Portland Utilities has completed 6 manhole rehabilitations during this period for the 2017 Rehabilitation Project, Basin 31-45 & 10-36. In reference to Phase 2 of the 2017 Rehabilitation Project, Basin 31-45 & 10-36, the contractor completed 1,650 feet of

mainline rehab, 35 service lateral rehabilitations and 5 manhole rehabilitations during this period.

12. The Meter Department set 54 meters through March 2018. Of the 54 meter sets, 24 were single-family homes, 17 were townhomes, 11 were apartments, 1 was irrigation and 1 was commercial. A total of 254 meters have been set this fiscal year.
13. The total amount of rainfall recorded at the Cleveland Filter Plant to date for April is 6.85 inches and is 1.64 inches above average for the month.

## **NEW BUSINESS**

### **Approval of Purchase Order to WESCO**

On motion by Mayor Tom Rowland and seconded by Vice Chairman Eddie Cartwright, the Utility Board took action to approve a purchase order to WESCO in the amount of \$62,892.80 for 49,600 feet of 795 AAC conductor to replenish stock. This purchase needs to be expedited due to the Harriman Road/Spring Branch Industrial Park Transmission Line Project depleting stock down to partial reels only. WESCO has the item in stock whereas the other vendors have longer lead times.

### **Approval of Purchase Order to Haren Construction Company**

On motion by Vice Chairman Eddie Cartwright and seconded by Joe Cate, the Board of Public Utilities voted to approve a purchase order to Haren Construction Company in the amount of \$107,000 for the improvements at the Raw Water Intake Pump Station consisting of automation of the basket screens, flushing process and replacement of exterior lighting. The project is budgeted for FY 2018.

### **Approval of Purchase Order to Southern Star Construction, LLC**

On motion by Mayor Tom Rowland and seconded by Joe Cate, the Board of Public Utilities voted unanimously to approve a purchase order to Southern Star Construction, LLC in the amount of \$114,500 for the improvements at the Raw Water Intake Pump Station Building consisting of pressure washing the building, coating concrete walkways, repair of steel walkway supports, repair of glass block windows caulking, repair of handrail, replacement of two doors and painting jib crane, rotating screen covers and other miscellaneous items. The project is budgeted for FY 2018. This is the second time this project has been bid. The first time it was bid, no bids were received. Therefore, the project was rebid and this one bid was submitted. The project is a challenging one with the location of the building being next to the river. References were checked, and Southern Star Construction was highly recommended.

### **Approval of Contract to Portland Utilities Construction Company, LLC**

On motion by Joe Cate and seconded by Mayor Tom Rowland, the Board of Public Utilities voted unanimously to approve a contract with Portland Utilities Construction Company, LLC in the amount of \$4,336,920 to perform 2,670 LF of 18", 3,000 LF of 15" and 24,650 LF of 8" and 10" mainline sewer rehabilitation by pipe bursting, CIPP lining and excavation. This contract will also include renewal of 552 sewer service laterals and cleanouts and 1,075 vertical feet of manhole lining. This is the first SRF project performed under loan number SRF2018-417 and will be paid for through the SRF funding. This project is budgeted for FY 2019 in the amount of \$4,350,000. The loan does not have loan forgiveness, but is provided a low, long-term interest rate. This company is located in Portland, Tennessee.

**Approval of Purchase of Property at 1575 Frederick Street NW**

On motion by Vice Chairman Eddie Cartwright and seconded by Mayor Tom Rowland, the Board of Public Utilities voted unanimously to approve the purchase of the property located at 1575 Frederick Street NW and owned by Mike and Leslie Montgomery. The purchase price is \$250,000 and is based on the appraisal dated February 16, 2018, from BenchMark Trust Corporation. The property will be used by Cleveland Utilities Wastewater Collection Department. The purchase is budgeted for FY 2018. Improvements to the property are budgeted for FY 2019.

**OTHER BUSINESS**

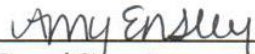
**Future Board Meeting Dates**

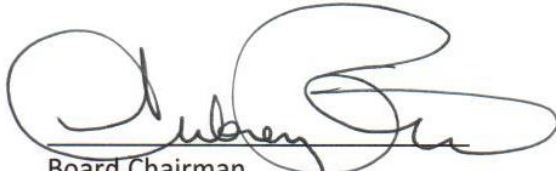
Future, regularly scheduled board meeting dates at the Tom Wheeler Training Center are as follows:

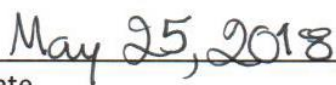
Friday, May 25, 2018, 12:30 p.m.

Friday, June 22, 2018, 12:30 p.m.

Friday, July 27, 2018, 12:30 p.m.

  
Board Secretary

  
Board Chairman

  
Date

**MINUTES OF REGULAR MEETING**  
**CLEVELAND UTILITIES BOARD**  
**MAY 25, 2018**

*The Board of Public Utilities met at 12:30 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; Walt Vineyard, Executive VP; Bart Borden, VP Electric Division; Craig Mullinax, VP Water and Wastewater; Marshall Stinnett, VP/CFO; John Corum, VP Administrative Services; Jan Runyon, Assistant VP Administrative Services; Barry Maples, Manager Treatment Facilities; Lafeomia Bowerman, Service Crewman; Matt Slifko, Chief Operator; Keith Arnwine, Water Quality Coordinator; Kyle Hoffner, Electromechanical Technician and Tim Siniard, *Cleveland Daily Banner*. Following the Pledge of Allegiance to the American Flag, Barry Maples delivered the invocation.

**MINUTES OF APRIL 27, 2018**

On motion by Vice Chairman Eddie Cartwright and seconded by Mayor Tom Rowland, the Board of Public Utilities voted to approve the April 27, 2018, minutes as written.

**MANAGER'S UPDATE AND ANNOUNCEMENTS**

**Memorial Day Holiday**

Cleveland Utilities will be closed on Monday, May 28, 2018, in observance of Memorial Day. Regular emergency and standby services will be maintained.

**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 June 2014 through June 2018 was reviewed. For the month of June, the residential retail electric rate will change to 9.903 cents per kilowatt-hour, an increase of 7.72 percent over May's rate of 9.193 cents. This rate change is driven by TVA's Fuel Cost Adjustment as well as the transition to summer month rates. As a continued trend, Cleveland Utilities will pass the TVA fuel cost rate adjustment to its consumers.
2. The April 2018 financial and statistical statements were presented to the Utility Board. During April, the cost of purchased power as a percentage of retail sales was 80.3 percent. The results for the month were electric sales revenue of \$6,522,646, which was offset by a purchased power expense of \$5,242,559. This resulted in an operating margin of \$1,280,087. Operating expenses for the month were \$1,452,235 and can be compared to a budgeted operating expense of \$1,580,182. The division serviced 31,603 customers. The net loss for the month was \$19,412, which is compared to a budgeted net income of \$6,349.
3. For April 2018, water sales revenue was \$1,123,737. Other revenue sources contributed an additional \$129,163 for the month. The division serviced 31,828 customers. Operating expenses for April totaled \$1,170,011 and can be compared to the budgeted amount of

\$1,237,327. The division recorded an operating income of \$82,889 and can be compared to the budgeted operating income of \$20,008.

4. For April 2018, wastewater treatment revenue was \$1,017,567. Other revenue sources contributed an additional \$83,704 for the month. The division serviced 19,041 customers. Operating expenses for the month were \$967,378. The division recorded an operating income of \$133,893, which is compared to a budgeted operating income of \$122,887.

### **Electric Division**

Bart Borden reported on the following:

1. During the month of April, all construction work was completed for the Harriman Road/Spring Branch Industrial Park Transmission Line Project. CU crews pulled in all the remaining 795 MCM 69 kV conductors, sagged the conductors to the proper tensions and tied them in to the insulators.
2. In reference to the South Industrial Park Road Distribution Lines Project, the overhead distribution lines are anticipated to be installed by the end of August at the latest based on the quoted delivery schedule and the complexity of the project.
3. All required contracts have been executed for the substation equipment for the East Cleveland 69 kV bus breaker addition. The project remains on schedule to be worked this coming fall in conjunction with the power transformer replacements.
4. The Engineering Department has obtained LED street light fixtures and issued a work order to replace all the existing high pressure sodium street light fixtures on North Ocoee Street from the Monument at 8th Street, northward to Mouse Creek Road. This is a pilot project and will involve the replacement of 83 fixtures with 66 new 133 watt LED and 17 new 45 watt LED fixtures. The purpose of the pilot project is to have an entire roadway lit by LED fixtures and to determine the labor costs to change out a large number of fixtures by a contractor. Cleveland Utilities is securing the services of Service Electric of Chattanooga, TN, to change the fixtures. The information obtained from the pilot project will be used to determine the overall costs to the City to change all existing non-LED fixtures to LED. The ongoing energy savings realized from the LED fixtures will offset a large portion of the project costs. Also, the stranded costs of removing the existing working fixtures will be factored in the cost analysis. The maintenance costs are expected to decrease as a result of changing to LED fixtures, but that determination will occur based on an annual review of the street light account, which is billed to the City monthly.
5. The construction work to expand CU's Substation Maintenance Building and Garage has been completed. The project included replacement of the existing metal roof, which was failing due to age and damage from the previous hail storm. CU's electrical maintenance crew is working to wire the new area, install a previously purchased paint booth and arrange equipment in the new area. The garage now has a compliant area to wash large vehicles with a collection system. The project went well and staff is very pleased with the outcome and the much needed additional space. Borden expressed appreciation to the Utility Board for their support and approval of this project.
6. Line construction crews installed underground fed primary and secondary electrical service to Freeman Place Subdivision off Michigan Avenue near Foxfire Subdivision. A total of 560

feet of #1/0 aluminum 15 kV primary conductor and 574 feet of low voltage secondary conductor, along with two 75 kVA pad-mount transformers were installed.

7. Engineering met with building contractors to work out details for the removal of electric facilities required for the demolition of the former Kmart structure at Bradley Square Mall. This will include the removal of one pad-mount transformer and approximately 1,000 feet of three phase underground primary and the relocation of another pad-mount transformer.
8. Operations personnel met and finalized the tree trimming, right-of-way clearing and herbicide spraying specifications prior to requesting bids for the next three-year trim cycle. Utility Forester Nick Romito presented a very detailed specification package that included both bid work, hourly work and unit work. Bids have been received and will be presented as a new business agenda item for the Utility Board's consideration. The requirements in the bid specifications call for line clearances that will increase system reliability. CU has seen tree related outage statistics rise considerably over the past several years. This triggered the need to hire a Utility Forester to manage and inspect the work by the tree management contractors.
9. An update was presented on traffic lighting:
  - Traffic Signal Coordinator Tad Bacon provided an estimate of \$16,351 to install additional signal heads and radar detection at 25<sup>th</sup> Street and Georgetown Road. The upcoming City project will widen a portion of Georgetown Road and feature dual left turn lanes onto 25<sup>th</sup> Street in the westward direction.

### **Water Division**

Craig Mullinax reported on the following:

1. The Headworks Rehabilitation Project at the Wastewater Treatment Plant (WWTP) is approximately 90 percent complete. Currently, the project is on hold while a section is being refabricated to match.
2. Bids were received for the new maintenance building at the WWTP. The project will be presented as a new business agenda item for the Utility Board's consideration.
3. Haren Construction has completed the Drainage Improvements Project at the Cleveland Filter Plant (CFP). The total contract amount of the project was \$97,392.
4. Multiple contractors will be performing work for the Raw Water Pump Station Project at the CFP. The electrical improvements will have to be completed first, and Haren Construction will be responsible for those. When this portion is finished, the other contractors will be able to fall in line.
5. All materials for the upgrade of the carbon feeder equipment at the CFP have been received. The installation date is scheduled to begin May 29, 2018.
6. The Georgetown Road Water Storage Tank, Booster Pump Station and Water Main Extension Project is advancing. Updated pictures of the progress were shown, and Mullinax provided an explanation for the work that has been occurring. Construction of the tank is anticipated to be complete in June. The thickness of the tank at the top will be approximately three inches, whereas the bottom will be around nine inches.

7. Hampton Backhoe has completed the Craigmiles Street, Ridgeview Drive and Cherokee Drive Water Main Replacement Project. The final contract amount was \$100,233, which was lower than the original contract amount of \$106,170.
8. The site for the Cherokee Gateway Boulevard Water Storage Tank has been established and surveying of the site is ongoing.
9. In reference to the Savannah Avenue and Spring Street Water Main Replacement Project, Hampton Backhoe has completed installation of the water line on Spring Street. The installation for Savannah Avenue was previously completed. Pressure and bacteriological testing are ongoing. Once complete, the services will be transferred from the old to new line.
10. The formal application for the 2010 Annexation Sewer Project on APD 40 was submitted to the State Revolving Fund (SRF) and was expected to be reviewed by the Tennessee Local Development Authority (TLDA) Board for approval in May; however, CU's project was not in the group of projects presented. The SRF staff advised the TLDA Board will meet in June, and CU's project will be reviewed for consideration of approval at that time.
11. Easements for the 2010/2012 Annexation Sewer Project on Benton Pike and Durkee Road have been received from Cleveland Surveying and are being reviewed by CU's staff.
12. Wilder Contracting has completed the Interior Improvements Project for the maintenance office area, bunker room and breakroom in the CU Water and Wastewater Administration Building. The final amount was \$33,826 and came in \$3,426 above the original contract amount, which resulted from some changes in the air conditioner for the server room.
13. Updates were provided for the following developments under construction:
  - The Spring Branch Industrial Park Project is nearing completion. The installation of the sewer main, force main and water main are all 99 percent complete, and the sewer pump station is 95 percent complete.
  - Hampton Backhoe has completed the installation of the sewer main and 95 percent of the water main for Stone Creek, Phase 1 on New Murraytown Road.
14. The following work was performed for the ongoing Wastewater Rehabilitation Project:
  - Portland Utilities has completed 15 service lateral rehabilitations and 14 manhole rehabilitations during this period for the 2017 Rehabilitation Project, Basin 31-45 & 10-36.
  - In reference to Phase 2 of the 2017 Rehabilitation Project, Basin 31-45 & 10-36, the contractor completed 15 service lateral rehabilitations and 22 manhole rehabilitations during this period.
  - The SRF has approved bids and contracts are being signed for Phase 1 of the Basin 10A-8 Rehabilitation & Basin 64-14A SSES Project. A preconstruction conference will be held in June.
15. The Meter Department set 33 meters through April 2018 compared to 25 for April 2017 and 44 for April 2016. Of the 33 meter sets, 22 were single-family homes, 6 were townhomes, 3 were apartments and 2 were commercial. A total of 287 meters have been set this fiscal year.
16. The total amount of rainfall recorded at the Cleveland Filter Plant thru May 23, 2018, was 3.51 inches for the month and 22.66 inches for the year (1.24 inches below normal).



## **NEW BUSINESS**

### **TVA Rate Change**

VP/CFO Stinnett advised on May 10, 2018, the TVA Board of Directors approved the establishment of a whole fixed charge, termed the Grid Access Charge (GAC) to be implemented on October 1, 2018. TVA is going to reduce their kilowatt-hour rate charged to Local Power Companies (LPC's) at the wholesale level by \$0.005, and this will be converted to a fixed charge to recover an equivalent amount of revenue. Prior to this approval, TVA charged CU based on demand (kW) and volume (kWh), and the only portion of CU's bill that was fixed was the charge received for CU's two access points, South Cleveland and East Cleveland Substations. Therefore, this is a major change in the way TVA is going to charge the LPC's. The Cleveland Utilities' staff is working on a proposal to incorporate this charge into CU's billing structure to match what TVA is doing and would correlate directly to CU customers at the retail level. Staff plans to meet with TVA representatives next week to share the proposal and discuss the methodology to ensure it has been vetted properly. This proposal is then expected to be presented to the Board of Public Utilities in June. Board Member Buckner asked if CU's internal rate increase is still effective July 1, 2018. Stinnett informed the internal rate increase CU requested and the Utility Board previously approved is a distribution cost change and will remain effective for July 1, 2018. The GAC is a separate scenario. TVA is changing their rate structure as well as their rates, and both will correlate together effective October 1, 2018. CU's position is to remain revenue neutral as a result of TVA's changes.

### **Engagement Letter for Fiscal Year 2018 Audit**

On motion by Mayor Tom Rowland and seconded by Joe Cate, the Utility Board voted to approve an engagement letter to audit Cleveland Utilities' accounts for the year ending June 30, 2018, for the contract amount of \$36,000 with the certified public accounting firm of Arnett, Kirksey, Kimsey, Sullivan, Lay & Hall, PLLC. There was no increase in price from 2017. CU's staff has been very pleased with their work over the past approximate 12 years.

### **Approval of Agreement and Purchase Order to ABC Professional Tree Services, Inc.**

On motion by Vice Chairman Eddie Cartwright and seconded by Mayor Tom Rowland, the Board of Public Utilities voted unanimously to approve an agreement and purchase order to for three years of vegetation management services for the period of July 1, 2018, through June 30, 2021, with ABC Professional Tree Services, Inc. The three-year trim cycle includes the entire CU transmission and distribution systems. This bid included both lump sum amounts for specific circuits and hourly rates for various "hot spot" tree work on the system and emergency storm work. ABC Professional Tree Services, Inc. submitted the low bid of \$5,002,971.50 for the lump sum amount. Since their hourly rates were not low bid, those rates were applied to the estimated required hours of work for the 3-year period, and ABC's bid for the total of the lump sum and hourly rates was still low bid overall. This contract will be evaluated after the first year and if work has been completed acceptable to CU, a yearly extension will be granted. This same process will be repeated for the final year of the contract. Three bids were received. This contract was bid on a six-month term in January 2018, until personnel had time to compile the specifications and documents for a three-year contract, and ABC was awarded the six-month contract in January. Staff has been very pleased with their work.

### **Approval of Purchase Order to ABB Inc., c/o Yoder Sales Agency**

On motion by Mayor Tom Rowland and seconded by Joe Cate, the Board of Public Utilities voted unanimously to approve a purchase order to ABB Inc., c/o Yoder Sales Agency in the amount not

to exceed \$65,975 for the testing and internal inspection of the spare, Westinghouse power transformer at East Cleveland Substation. This spare transformer was placed in service on May 22, 2017, after the C-phase unit experienced a failure on May 13, 2017. Oil tests have been performed routinely each month since the unit was placed in service. The combustible gas totals continued to rise, indicative of an internal issue. CU's Operations Department sought expert advice from TVA and other testing companies regarding the situation. In the meantime, CU's insurance company also recommended the unit be taken out of service to be examined. ABB is recognized as the industry expert on shell form transformers and now owns the Westinghouse design. With summer temperatures quickly approaching, there was an immediate need to remove the unit from service for further inspection, and ABB had a window in their schedule which allowed for the unit to be inspected the week of May 7<sup>th</sup>. In order for ABB to perform the work, this purchase order was signed by the President/CEO on May 2, 2018, as an emergency due to the circumstances and availability of ABB.

#### **Approval of Contract with TriCon Inc.**

On motion by Chari Buckner and seconded by Joe Cate, the Board of Public Utilities voted unanimously to approve a contract with TriCon Inc., in the amount of \$345,720 to construct a new maintenance building consisting of a pre-engineered metal building with an office and restroom located at the Cleveland Wastewater Treatment Plant. This project is budgeted for FY 2018 and FY 2019.

#### **Approval of Purchase Order to Allied Universal Corporation**

On motion by Mayor Tom Rowland and seconded by Vice Chairman Eddie Cartwright, the Utility Board took action to approve a purchase order to Allied Universal Corporation in the amount of \$192,730 for the annual purchase of chlorine gas and sulfur dioxide. Chlorine is used at the Cleveland Filter Plant, Waterville Springs, Hiwassee Utility Commission and Wastewater Treatment Plant as a disinfectant for both potable water and wastewater. Sulfur dioxide is used to remove the chlorine at the Wastewater Treatment Plant.

#### **Sanitary Survey Results of Cleveland Utilities' Water System**

Mullinax reported the Tennessee Department of Environment and Conservation (TDEC) Division of Water Resources conducted a sanitary survey of the water system on October 10 and 11, 2017. Cleveland Utilities' Water System earned 599 points out of a possible 599 for a numerical rating of 100 percent, which reaffirms CU's water system as an "approved" water system. This is the second time CU has achieved a perfect score, which is very hard to accomplish. Mullinax introduced employees Keith Arnwine, Lafeomia Bowerman, Kyle Hoffner, Barry Maples and Matt Slifko and praised them for their hard work and the roles they perform for Cleveland Utilities. These employees represent a small number of the employees involved in this endeavor. This survey covered the time period from August 2016 to August 2017. Chairman Aubrey Ector said, "On behalf of the board, thank you for your hard work and this achievement."

#### **OTHER BUSINESS**

##### **Future Board Meeting Dates**

Future, regularly scheduled board meeting dates at the Tom Wheeler Training Center are as follows:

Friday, June 22, 2018, 9:00 a.m.

Friday, July 27, 2018, 12:30 p.m.  
Friday, August 24, 2018, 12:30 p.m.

Amy Ensley  
Board Secretary

[Signature]  
Board Chairman

6/22/2018  
Date

**MINUTES OF REGULAR MEETING**  
**CLEVELAND UTILITIES BOARD**  
**JUNE 22, 2018**

*The Board of Public Utilities met at 9:00 a.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; Walt Vineyard, Executive VP; Craig Mullinax, VP Water and Wastewater; Marshall Stinnett, VP/CFO; John Corum, VP Administrative Services; Jan Runyon, Assistant VP Administrative Services; Dean Watson, Electric Operations Manager; Annette Townsend, Customer Service Representative II; David Yost, GIS Director; and Tim Siniard, *Cleveland Daily Banner*. Following the Pledge of Allegiance to the American Flag, Annette Townsend delivered the invocation.

**MINUTES OF MAY 25, 2018**

On motion by Mayor Tom Rowland and seconded by Vice Chairman Eddie Cartwright, the Board of Public Utilities voted to approve the May 25, 2018, minutes as written.

**MANAGER'S UPDATE AND ANNOUNCEMENTS**

**Independence Day Holiday**

Cleveland Utilities will be closed on Wednesday, July 4, 2018, in observance of Independence Day. The Call Center will be open and regular emergency/standby services will be maintained 24/7.

**Cleveland State Foundation Community First Capital Campaign Donation**

On Monday, June 18, 2018, Cleveland Utilities partnered with the Southeast Industrial Development Association (SEIDA) and presented a check to Cleveland State Community College (CSCC) President, Dr. Bill Seymour, along with several of the CSCC staff and board members for their Community First Capital Campaign. John Corum, Tim Henderson and Walt Vineyard were in attendance on behalf of CU, and Beth Jones and Stephanie Watkins represented SEIDA. Cleveland Utilities has economic development funds through SEIDA, and CU designated \$5,000 of those funds and SEIDA matched the amount for a total combined donation of \$10,000. In this campaign, if CSCC raises \$2.5 million, they will receive a \$25 million grant from the State. The funds will be used to build a new Health & Sciences Building and to renovate the Mary T. Barker Humanities Building.

**Tennessee Occupational Safety and Health Administration (TOSHA) Audit**

In 2016, CU established their own independent Occupational Safety and Health Plan under TOSHA's public sector program. Administrative Services VP John Corum reported on June 4, 2018, TOSHA representative, Hank Plain, conducted an audit of CU. The morning began with a conference and inspection of record-keeping and written programs for CU's safety programs, all of which went extremely well. Plain then visited the WWTP for the majority of the day, which resulted in a few findings; however, all were abated by the end of the week. Corum commended Chris Wilds and the Facilities Maintenance Department, along with Mike Ward and staff at the WWTP and Nathan Vann for their assistance in addressing the items quickly and efficiently. The audit is not yet complete; the Process Safety Management (PSM) Plan is still under review, and CU is awaiting the final report to see if further action is required. CU is required to operate under a

PSM Plan due to the volume of chlorine at the plants. Steve Barger maintains the PSM Plan and does an exceptional job. Overall, the visit went really well, and another update will be provided once the official report is received. Corum advised he is appreciative of the partnership with TOSHA. Plain has been terrific to work with, and CU wants to ensure any type of hazard in the workplace is eliminated. TOSHA is Tennessee's state level branch of the Federal OSHA.

## **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 July 2014 through July 2018 was reviewed. For the month of July, the residential retail electric rate will change to 10.115 cents per kilowatt-hour. As a comparison, June's rate was 9.903 cents. This rate change is driven by TVA's Fuel Cost Adjustment, as well as the very small adjustment CU made at the kWh rate effective July 1, 2018. As a continued trend, Cleveland Utilities will pass the TVA fuel cost rate adjustment to its consumers.
2. The May 2018 financial and statistical statements were presented to the Utility Board. During May, the cost of purchased power as a percentage of retail sales was 77.2 percent. The budgeted percentage is 80.9 percent. The results for the month were electric sales revenue of \$8,116,411, which was offset by a purchased power expense of \$6,269,561. This resulted in an operating margin of \$1,846,850. Operating expenses for the month were \$1,816,896 and can be compared to a budgeted operating expense of \$1,585,021. The division serviced 31,825 customers. Net income for the month was \$226,988, which is compared to a budgeted net loss of \$33,762. Stinnett noted the month of May was extremely warmer than projected and is reflected in TVA's Fuel Cost Adjustment moving into July.
3. For May 2018, water sales revenue was \$1,189,138. Other revenue sources contributed an additional \$124,301 for the month. The division serviced 31,998 customers. Operating expenses for May totaled \$1,258,868 and can be compared to the budgeted amount of \$1,267,368. The division recorded an operating income of \$54,571 and can be compared to the budgeted operating income of \$91,633.
4. For May 2018, wastewater treatment revenue was \$1,028,088. Other revenue sources contributed an additional \$74,950 for the month. The division serviced 19,137 customers. Operating expenses for the month were \$950,174. The division recorded an operating income of \$152,864. This can be compared to a budgeted operating income of \$109,910.

### **Electric Division**

Dean Watson reported on the following in the absence of Bart Borden:

1. All construction work has been completed for the Harriman Road/Spring Branch Industrial Park Transmission Line Project except for two spans of conductor just outside of South Cleveland Substation. An outage is required on the adjacent 69 kV circuit to enable the crews to install and tie in the conductor and new switch.
2. In reference to the Spring Branch Industrial Park Innovation Drive Distribution Lines Project, the overhead distribution lines remain on schedule for installation by the end of August.

3. All required contracts have been finalized for the substation equipment for the East Cleveland 69 kV bus breaker addition, and the project remains on schedule to be worked this coming fall in conjunction with the power transformer replacements. The new 69 kV bus breaker has arrived and is being prepped for use by substation department personnel.
4. CU continues to work with Service Electric of Chattanooga, TN, to finalize plans for the North Ocoee Street LED Street Lighting Conversion Project which encompasses the area on North Ocoee Street from the Monument at 8th Street northward to Mouse Creek Road. Electric Engineering is currently working through the new TDOT permitting process for traffic control along with acquiring TDOT approval for the photometric layout design.
5. The Electric Engineering Department purchased and received a new DJI Matrice 210 Drone capable of carrying a visible light and a thermal imaging camera. The new drone will be utilized to survey the electric system to check the structural integrity of poles as well as the thermal integrity of components and connections. Since being placed into service, engineering has released a work order to replace 17 wood poles on Chippewa Avenue after the aerial inspection with the new drone revealed rotten pole tops that could not be repaired without creating code clearance violations. The estimated project cost is just under \$140,000.
6. An update was provided for the spare transformer at East Cleveland Substation. After receiving ABB's report and recommendation, CU prepared to energize the unit with no load and pull oil samples over a 24-hour period to determine if the core and coil were actually the source of the gassing. ABB had filtered and degassed the oil, which provided a good baseline to begin the testing. Oil sample kits were obtained, and the unit was to be energized once there was a break in the weather due to wet conditions. Additionally, operations personnel met with TVA officials and field personnel to finalize plans to place additional load onto TVA's bank for the summer months. After agreeing to utilize the common transfer bus to feed CU's three 69 kV feeder breakers, one distribution substation was placed onto each 69 kV breaker, allowing up to 50 MVA of load on the TVA bank until delivery of the new power transformers this fall.
7. At the previous meeting of the Utility Board, ABC Professional Tree Services, Inc. was awarded the three-year vegetation management contract. The cost for the three-year circuit work totaled just over \$5 million. Along with the circuit work, the bid also included hourly rates for items such as hot spot work and storm restoration as well as per unit work for individual tree removals based on the tree size. In an effort to better track and annually budget these costs, an estimate will be made for both the hourly work and per unit work expected to occur this coming year based on ABC's invoices supplied for the past six months. Plans are to generate a purchase order based on these estimated charges to present to the Utility Board for consideration at the next meeting.
8. CU line crews installed a total of 35 new underground services, over 3,000 feet of conduit and 3,500 feet of underground conductor during the month of May. This is a marked increase over previous months and reflects the upturn in the housing market. The trenching and conduit installation for these services was previously being performed by Asplundh employees. The expense and labor costs of CU crews digging these services versus contracting to a third party will be closely monitored to determine which is more cost effective. Contracting the digging could also free up manpower for other line projects.

9. An update was presented on traffic lighting:
  - Eight ATC traffic controllers have been programmed and Ethernet switches prepared for installation at five intersections along the Paul Huff Parkway corridor. The controllers and communication upgrades were required for a pilot project city personnel set up with Miovision utilizing new equipment designed to capture performance data measurements along the entire test area. The collected data will enable existing traffic coordination and timing programs to be evaluated and adjusted for maximum efficiency. The controllers and Ethernet switches will be installed prior to the start of the project.
  - CU's Traffic Signal Coordinator has been negotiating with Peek Traffic Corporation to provide a discount on the latest generation of central software, Spinnaker. Central software is the backbone of all communications with traffic controllers and coordinated software. The existing software, IQ Central, is no longer supported and very limited in its capabilities of ATC controllers. Their current price of the software is just over \$100,000 and also requires a yearly maintenance fee.
10. The SCADA system recorded a peak of 182,670 kW on May 24, 2018, during a peak shaving event. TVA's billed demand peak of 181,870 kW coincided with CU's peak and was recorded at 3:59 p.m. CST. The peak shaving resulted in a reduction of 3,274 KW, a load reduction of 2.07 percent and a cost avoidance of \$32,997.75. The year-to-date cost avoidance total stands at \$119,470.64.
11. Several plats and site plans were reviewed during the month of May. The most notable include Popeye's on Paul Huff Parkway at Frontage Road, the Heartland Subdivision on Tasso Lane, the Grove at the Farm Phase 2 on Grove Park Drive and the Bradley Place Site Plan at the former Kmart location at the Bradley Square Mall. Copies of the plats and plans were available for viewing.

### **Water Division**

Craig Mullinax reported on the following:

1. The Flocculation/Sedimentation Basin Improvements Project at the Cleveland Filter Plant (CFP) will soon begin. The notice to proceed is July 9, 2018, but Haren Construction may be able to commence a few days earlier.
2. Work for the Raw Water Pump Station Project has began. Materials are on order for the electrical improvements, and this portion is expected to begin in late July. Southern Star Construction is onsite and has started the building improvements.
3. Construction is underway for upgrade of the carbon feeder equipment at the CFP, and the contractor is expected to be complete in two weeks.
4. The Georgetown Road Water Storage Tank, Booster Pump Station and Water Main Extension Project is advancing. The pump station is being delivered today and will be set in place on Georgetown Road at 10:00 a.m. Updated pictures showing progress of the tank construction were displayed. The tank is drying and is essentially structurally complete. The contractor will return in a few weeks to paint and install hardware. There is a curing period of approximately one month, and the tank can then be filled with water.
5. Bids were opened at 4:00 p.m. yesterday, June 21, 2018, for water main extension/replacement projects for Baugh Springs Trail & Banther Road, Van Davis Road

- (SR60 to Swafford Cemetery Road), and Van Davis Road south of Morgan Road. These three projects will be presented to the Utility Board for consideration at July's meeting. Four to five bids per project were received.
6. Hampton Backhoe has completed the Savannah Avenue and Spring Street Water Main Replacement Project. CU is awaiting the invoice for final payment.
  7. The Tennessee Local Development Authority (TLDA) Board met in June and approved the 2010 Annexation Sewer Project on APD 40. Once official approval is received, staff will proceed with the bidding process.
  8. Westco has been engaged to initiate the clearing and maintenance of 36,750 feet (7 miles) of sewer easements. Work is anticipated to begin on June 25, 2018.
  9. Engineering is reviewing the following plans:
    - Cobblestone Ridge Subdivision on Old Chattanooga Pike consisting of 48 lots, 1,800 feet of 6-inch water main and 2,180 feet of 8-inch sewer main. D&S Custom Homes, LLC is the developer.
    - RaceTrac Market on APD 40 at Holloway Road comprising 360 feet of 8-inch water main and 500 feet of 8-inch sewer main. RaceTrac Petroleum, Inc. is the developer.
    - Bradley Place Sewage Pump Station Upgrade at Bradley Square Mall. Morrison Companies is the developer.
  10. Hampton Backhoe has completed the Falcon Crest Water Booster Pump Station on Frontage Road as well as the installation of the water and sewer main for Stone Creek, Phase I on New Murfreesboro Road.
  11. The following work was performed for the ongoing Wastewater Rehabilitation Project:
    - Portland Utilities has completed 5 manhole rehabilitations during this period for the 2017 Rehabilitation Project, Basin 31-45 & 10-36.
    - In reference to Phase 2 of the 2017 Rehabilitation Project, Basin 31-45 & 10-36, the contractor completed 1 service lateral rehabilitation and 8 manhole rehabilitations during this period.
    - A preconstruction conference was held on June 19, 2018, for Phase I of the Basin 10A-8 Rehabilitation Project. The notice to proceed will be issued on July 2, 2018, and the lining contractor will begin pre-CCTV work the first week of July.
  12. The Meter Department set 40 meters through May 2018 compared to 25 for May 2017 and 13 for May 2016. Of the 40 meter sets, 36 were single-family homes, 2 were townhomes and 2 were duplexes. A total of 327 meters have been set this fiscal year compared to 327 for May 2017 and 333 for May 2016.
  13. The total amount of rainfall recorded at the Cleveland Filter Plant for the month of May was 7.01 inches, which is 2.11 inches above normal. As of June 19, 2018, a total 0.29 inches of rainfall has been recorded at the CFP for this month. However, this number is somewhat deceiving. During this same period, a total of 1.6 inches was recorded in one day at the Water Division Main Office Building. CU has 6 rain gauges in various locations around town and different levels were recorded at each one.
  14. The water demand has been very strong to date for June. If projections continue, demand will average over 12.3 million gallons a day for the month, up 11.5 percent from this same time last year.



## **OLD BUSINESS**

### **Dell Purchase Order Voided**

The purchase order to Dell Computer Corporation in the amount \$77,961.35 for the Microsoft Select renewal for a 3-year term which was approved by the Utility Board at the March 2, 2018, board meeting has been voided due to the quote from Dell being incorrect. Dell had not invoiced CU for any of the amount and no payments were made to Dell. The renewal will be on a yearly term, and the amount does not fall within the threshold requiring board approval.

### **TVA Rate Change/Grid Access Charge (GAC)**

As discussed at the last board meeting, CU has been working diligently with TVA representatives to determine the proper translation of the Grid Access Charge (GAC) from the wholesale bill to the retail bill. Henderson commended Borden, Stinnett and Vineyard for their involvement and efforts in these negotiations. Stinnett then provided a detailed explanation of the GAC and the proposed conversion of this fee to CU and its customers. On May 10, 2018, the TVA Board of Directors approved the establishment of a new wholesale fixed charge, termed the Grid Access Charge. Prior to this approval, TVA charged Cleveland Utilities based upon the monthly demand (kW) and volume (kWh). The only portion of CU's bill from TVA that was fixed prior to this change was the charge received for the two access points (South & East Cleveland Substations).

As of October 1, 2018, TVA will implement the GAC. The GAC will be based upon a rolling, five year average of volumetric purchases (kWh) for each Local Power Company (LPC). The GAC is calculated by multiplying an LPC's five year average of purchases (kWh) times \$0.005. This charge will be updated annually at the end of TVA's fiscal year in September. For the fiscal year 2019, CU's GAC will be \$4,248,433. As an offset to this fixed charge, TVA is also decreasing its wholesale base kWh rate by \$0.005.

Due to this wholesale change, CU is requesting this fixed charge be a direct pass through to the retail bill. CU has calculated the total bill impacts of this change, and has decided to phase this change in over a 2-year period, with the first phase being implemented in October 2018 and the second phase being implemented in October 2019. The change in retail rates will mirror the change at the wholesale level. CU will calculate the kWh consumption of the Residential and GSA 1 class and calculate a monthly fixed charge, while decreasing the kWh rate for these classes. The GSA 2 and GSA 3 classes will be based upon the individual customers' five year average of consumption. This charge will be updated annually for all classes. In addition, this new fixed component will be displayed on the CU bill as "TVA Grid Access Charge" to provide transparency to all customers as to the driver of those charges.

Beginning in October 2018, the GAC will be \$2.00 per month for the residential and the GSA 1 customers. All GSA 2 & 3 customers will have their GAC calculated based on the previous five year average of consumption multiplied by \$0.0025. These charges will be offset by a reduction in the kWh rate of \$0.00181 for the residential class, \$0.00126 for the GSA 1 class, and \$0.0025 for the GSA 2 & 3 classes.

Lastly, as a measure of mitigating risk associated with a two year implementation, CU will request a \$0.00032 increase in the kWh rate on the residential and GSA 1 retail bill for October 2018. This increase will be removed along with implementation of future adjustments of the GAC in October 2019.

Mayor Rowland questioned what Volunteer Energy recently requested of the Bradley County Commission concerning TVA rates. Stinnett informed VEC was asking the Commission to compose a letter to oppose or not support TVA's proposed 1.5 percent rate increase. The GAC is a net zero rate structure redesign and completely separate issue. TVA has had rate increases of 1.5 percent over the last four years, which are a direct pass through to the retail customer, and they plan to continue with the 1.5 rate increases annually for at least the next two years. TVA's initial plan included these rate increases through 2021. VEC would like updated information to substantiate the necessity of the rate increase.

Board Member Buckner then asked if there is less emphasis on energy efficiency with the reduction in the kWh rates in the GAC. Stinnett advised five years ago, TVA's projections showed a steady incline in sales; however, energy efficiency has pushed demand flat to almost negative. When facilities were built and rates were designed for a growing demand period, and then it's determined to be flat to negative, it's causing pressure such as this to take place. Along with energy efficiency, the industry is also facing other challenges through third party distributed generation, technological advances, etc. There is a value of the grid, and customers who have access to the system need to be fairly paying for use of the asset. The GAC restructures how these costs are recovered.

On recommendation by President/CEO Henderson, Vice Chairman Eddie Cartwright motioned and Chari Buckner seconded for the Board of Public Utilities to approve the GAC as presented above. The motion passed unanimously.

**Approval of Agreement and Purchase Order to Wilder Contracting, LLC**

On motion by Mayor Tom Rowland and seconded by Chari Buckner, the Board of Public Utilities voted unanimously to approve a purchase order and agreement with Wilder Contracting, LLC for the 2018 Building Renovation Project for renovations to the exteriors of the Power Service Center (Main Building) and TWTC in the amount of \$709,084. Three bids were received. Wilder Contracting submitted the low bid of \$1,039,000, which exceeded the budgeted project amount of \$800,000. Value engineering was used to reduce costs to get the pricing within budget.

Vineyard displayed a print of the architectural rendering and highlighted major items in the project which include new stone focal towers, stone accents and staining of the brick at both buildings as well as parapet panel replacement at the main building. Henderson informed bids for the original building were let in 1969 and work began in 1970. Corum then expressed appreciation to David Yost for his diligent work on the value engineering with Wilder's President, Travis Brooks, and provided further details. The signage was removed from the original bid in hopes of negotiating better pricing outside this contract. Facilities improvements are included as an initiative in CU's new Strategic Plan for 2018-2021 which is being presented as a new business item. These upgrades will make an overall significant difference and be a great improvement. Additionally,

wayfaring signage to help customers navigate the campus and parking lot renovations will be incorporated over the next three years. Work is expected to begin in late June or early July.

## **NEW BUSINESS**

### **Approval of 2018-2021 Strategic Plan**

On motion by Joe Cate and seconded by Mayor Tom Rowland, the Board of Public Utilities voted unanimously to approve the 2018-2021 Strategic Plan for Cleveland Utilities. Corum advised the Strategic Plan will focus on four major initiatives: 1) Enhance Internal and External Communications; 2) Improve Customer Service; 3) Proactive Customer Advocacy; and 4) Facilities Improvements. The Communications Initiative was carried over from the previous Strategic Plan and one in which CU will continue to focus efforts on. There is always work to do in this area and a great challenge for any organization. The second and third initiatives focus on customers/key accounts with the enhancement of customer service and advocacy. One of the goals includes the establishment of a Customer Service Quality Team. Lastly, the remaining initiative encompasses the facilities improvements as outlined above.

### **Approval of Property, Liability and Workers' Compensation Insurance for Fiscal Year 2019**

On motion by Mayor Tom Rowland and seconded by Joe Cate, the Board of Public Utilities voted unanimously to approve property, liability, and workers' compensation insurance from July 1, 2018, and ending June 30, 2019, with Distributors Insurance Company (DIC) for a premium of \$917,652. DIC is a wholly-owned subsidiary of TVPPA. Arthur J. Gallagher & Co. is the program manager. There was an increase in premium of just under five percent from 2018 and is fair due to the exposure over the past three years and loss of transformers per Stinnett.

### **Approval of Purchase Order to Jackie Evans Trucking Company**

On motion by Vice Chairman Eddie Cartwright and seconded by Chari Buckner, the Utility Board took action to unanimously approve a purchase order with Jackie Evans Trucking Company in the amount not to exceed of \$100,750 for the removal of alum sludge, approximately 650 loads, from the Cleveland Filter Plant. The service period is from July 1, 2018, to June 30, 2019, and the service is budgeted for FY 2019. This is a sole source procurement.

### **Approval of Purchase Order to Vulcan Materials Company**

On motion by Joe Cate and seconded by Chari Buckner, the Board of Public Utilities voted unanimously to approve a purchase order with Vulcan Materials Company in the amount not to exceed \$90,000 for the purchase of stone backfill. The purchase period is from July 1, 2018, to June 30, 2019. The stone backfill is budgeted for FY 2019 and is a sole source procurement.

## **OTHER BUSINESS**

### **Future Board Meeting Dates**

Future, regularly scheduled board meeting dates at the Tom Wheeler Training Center are as follows:

Friday, July 27, 2018, 12:30 p.m.  
Friday, August 24, 2018, 12:30 p.m.  
Friday, September 28, 2018, 12:30 p.m.

Amy Ensley  
Board Secretary

[Signature]  
Board Chairman

7/27/2018  
Date

**MINUTES OF REGULAR MEETING**  
**CLEVELAND UTILITIES BOARD**  
**JULY 27, 2018**

*The Board of Public Utilities met at 12:30 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; Bart Borden, VP Electric Division; Greg Clark, Water and Wastewater Manager; John Corum, VP Administrative Services; Amy Ensley, Utility Board Secretary; Mike Rader, General Foreman; Jan Runyon, Assistant VP Administrative Services; Richard Snyder, Network Systems Manager; Marshall Stinnett, VP/CFO; Walt Vineyard, Executive VP; Nathan Vann, Safety Director; Joe Fivas, City Manager; and Tim Siniard, *Cleveland Daily Banner*. Following the Pledge of Allegiance to the American Flag, Mike Rader delivered the invocation.

**MINUTES OF JUNE 22, 2018**

On motion by Mayor Tom Rowland and seconded by Vice Chairman Eddie Cartwright, the Board of Public Utilities voted to approve the June 22, 2018, minutes as written.

**MANAGER'S UPDATE AND ANNOUNCEMENTS**

**Tennessee Municipal Electric Power Association (TMEPA) Power of Excellence Award**

Mayor Tom Rowland was presented with the distinguished TMEPA Power of Excellence Award on July 12, 2018, at their Annual Meeting held in Chattanooga, TN. This award is given annually to senior staff, general counsel, lobbyist, board members or community leaders who have demonstrated outstanding service and unparalleled leadership to their local utility, TMEPA and Public Power. Mayor Rowland expressed appreciation to CU for being nominated for this award and also congratulated President/CEO Henderson for recently being honored with the Junior Achievement Ron Braam Award.

**Volleyball Tournament**

The River Counties Association of Realtors "Volley for a Cure" Volleyball Tournament will be held on Thursday, August 16, 2018, in the Cleveland State Community College gymnasium. There was enough interest from employees for CU to form two teams this year. CU has won three of the previous four tournaments. All proceeds benefit the American Cancer Society.

**New Newsletter Design**

The latest edition of the employee newsletter was published with a new layout and design. A copy was included in board folders. Moving forward, the customer newsletter will be in this same format. Henderson commended Corum and the Customer Relations team for their creativeness and work in putting this together.

**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 August 2014 through August 2018 was reviewed. For the month of August, the residential retail electric rate will change to 10.116 cents per kilowatt-hour, an increase of 0.01 percent over July's rate of 10.115 cents per kilowatt-hour. This rate change is driven by

TVA's Fuel Cost Adjustment. As a continued trend, Cleveland Utilities will pass the TVA fuel cost rate adjustment to its consumers.

2. Since June represents the end of fiscal year 2018, the year-end financial records are still being compiled and the regular financial and statistical report for June 2018 will be presented in August; however, preliminary figures were provided. During June, the cost of purchased power as a percentage of retail sales was 80.7 percent. As a comparison, the budgeted percentage is 80.9 percent for FY 2018. The results for the month were electric sales revenue of \$9,035,720, which was offset by a purchased power expense of \$7,290,111. This resulted in an operating margin of \$1,745,609 and is compared to a budgeted margin of \$1,654,420 for the month. The results for FY 2018 are electric sales revenue of \$99,384,785, which was offset by a purchased power expense of \$79,078,347. This resulted in an operating margin of \$20,306,438 and can be compared to a budgeted margin of \$19,564,438 for FY 2018.
3. For the month of June, water sales revenue was \$1,278,461 (unadjusted for unbilled revenue). This is compared to the budgeted amount of \$1,329,830. The results for FY 2018 water sales revenue was \$14,368,222 (unadjusted for unbilled revenue) and can be compared to a budgeted revenue of \$14,881,328 for FY 2018.
4. For June 2018, wastewater treatment revenue was \$1,056,624 (unadjusted for unbilled revenue), with a budgeted amount of \$1,023,877. The results for FY 2018 wastewater sales revenue was \$12,313,016 (unadjusted for unbilled revenue) and can be compared to a budgeted revenue of \$12,153,321 for FY 2018.
5. Stinnett added the numbers fell directly in line with the budget for FY 2018, which makes budgeting for FY 2019 easier.

### **Electric Division**

Bart Borden reported on the following:

1. As reported last month by Operations Manager Dean Watson, minimal work remained in the Harriman Road/Spring Branch Industrial Park Transmission Line; therefore, this will be the final report on this project. The actual project cost was below the estimated cost. CU crews did an outstanding job, and Borden thanked now retired Line Foreman, Travis Ownby for his leadership on the project and all who worked to make it a success.
2. In reference to the Spring Branch Industrial Park Innovation Drive Distribution Lines Project, the steel pole manufacturer quoted a late June delivery; however, the pole structures have yet to be delivered. They reported difficulty in getting steel for the construction of the poles. The new delivery is now set for August 17, 2018, creating a month and a half delay in the project, which will be evaluated in any future bids with this company. Based on the new delivery date, the project is now anticipated to be completed by the middle of October.
3. Cleveland Utilities is presently meeting with TVA representatives to schedule the necessary outages for the East Cleveland 69 kV Bus Breaker Addition Project. The outage will allow for the addition of the bus breaker, power transformer replacements and changes involving the differential relay to eliminate the NERC CIP 005 issue.
4. The North Ocoee Street LED Street Lighting Conversion Project is on hold awaiting approval from the Tennessee Department of Transportation (TDOT) for the photometric layout design before this project can begin.

5. A 3,600 square foot dental office is under construction on Stuart Crossing NE, and temporary service was provided to the new building in June. Engineering has released a work order to provide permanent electrical service to the new 36 kW load, which will be served from an existing 150 kVA pad-mount transformer.
6. Engineering and operations staff are working with Lee University and Public Works to coordinate the relocation of primary conductors, a transformer, street and security lighting for the road widening on Parker Street.
7. A work order was issued to serve the new Westmore Pointe Subdivision with underground fed electric facilities. The new 7-lot development is located on the east side of Inverness Drive just off Candies Lane NW.
8. CU line crews completed the Barney Lane Reconductor Project consisting of the replacement of 9,375 feet of 556 MCM AAC conductors with 795 MCM AAC conductors and 3,125 feet of 3/0 AAC with 336 MCM AAC. The project was necessary to upgrade the current carrying capacity of an important tie line utilized in switching loads for maintenance and emergencies.
9. An update was provided for the replacement of the power transformers at East Cleveland Substation. Operations Engineer Kim Duncan visited Georgia Transformer to witness the core and coil inspection and was also able to inspect the tank of the first power transformer to be replaced at the site. The unit testing began on July 5<sup>th</sup>. CU has been furnished the test results, installation and maintenance manuals, and the unit passed all required electrical tests.
10. An update was presented on traffic lighting:
  - Traffic Signal Coordinator Tad Bacon attended the first meeting of the Tennessee Traffic Signals User Group in Chattanooga. The group has been assembled to provide assistance, networking and resources to both small and large cities. Discussion at the meeting addressed infrastructure, maintenance, engineering and design, among other things.
11. Once again, there was a great deal of activity in June with new site plans and plats. A few of interest include the Lee University Baseball Field Project, which is a substantial facility replacement and Cobblestone Ridge Subdivision, a 48-lot development along Old Chattanooga Pike. Copies of all submitted plans and plats were available for viewing.

### **Water Division**

Greg Clark reported on the following in the absence of Craig Mullinax:

1. The contractor is working on the Headworks Rehabilitation Project at the Wastewater Treatment Plant (WWTP). A total of three new screens are in operation and working well, and the old screens have been removed.
2. The Flocculation/Sedimentation Basin Improvements Project at the Cleveland Filter Plant (CFP) is getting ready to commence. The contractor is onsite and receiving material.
3. The Raw Water Pump Station Project at the CFP is underway. Haren Construction is performing the electrical improvements, and Southern Star Construction is working on the building improvements.
4. The installation for the carbon feeder equipment upgrade at the CFP is complete. Startup is scheduled for next week.

5. The Georgetown Road Water Storage Tank, Booster Pump Station and Water Main Extension Project is ongoing. Crom has been onsite again this week to finish painting, installing hardware and cleanup of the site. Most of the pump station has been installed. Angel Construction has to finish laying the waterline, which is anticipated to begin Monday, July 30.
6. The water main extension/replacement projects for Baugh Springs Trail & Banther Road, Van Davis Road (SR60 to Swafford Cemetery Road), and Van Davis Road south of Morgan Road are being presented as new business items.
7. Hampton Backhoe began construction for the Parker Street Water Main Replacement Project between 8<sup>th</sup> Street and Central Avenue on July 20. The project consists of the replacement of 1,200 feet of 6-inch water main, as well as some sewer work. Lee University is funding a portion of the project.
8. Engineering approved plans for Stone Creek, Phase 2 on New Murraytown Road. The 16-lot development will comprise 858 feet of 8-inch sewer main. Dennis Epperson is the developer.
9. An update was provided for the ongoing Wastewater Rehabilitation Project:
  - Westco has cleared approximately 15,000 feet of sewer line easement.
  - All punch list items have been completed for both 2017 Rehabilitation Projects in Basins 31-45 & 10-36. Paperwork is being finalized, and the projects will be closed out.
  - Portland Utilities began work this week for Phase I of the Basin 10A-8 Rehabilitation Project. They came early and began lining in the Parker Street area ahead of the upcoming paving work for the road widening.
10. The Meter Department set 24 meters through June 2018 compared to 37 for June 2017 and 50 for June 2016. Of the 24 meter sets, 16 were single-family homes, 5 were townhomes, 2 were commercial and 1 was irrigation. A total of 351 meters have been set this fiscal year compared to 364 for June 2017 and 383 for June 2016.

## **NEW BUSINESS**

### **Safety Internal Performance Measures (IPM's)**

The Safety Internal Performance Measures (IPM's) for January 2018 through June 2018 were presented by Safety Supervisor Nathan Vann. This is a component of CU's Strategic Plan.

Results for January – June 2018 are:

	<b>Electric &amp; Water Combined</b>	<b>Electric Division</b>	<b>Water/Wastewater Division</b>
OSHA Recordable Incident Rate	<b>1.43</b>	<b>0.83</b>	<b>2.25</b>
DART Rate	<b>1.43</b>	<b>0.83</b>	<b>2.25</b>
Lost-Time Case Rate	<b>0</b>	<b>0</b>	<b>0</b>
Vehicle Accident Rate	<b>0</b>	<b>0</b>	<b>0</b>

The following data went into the calculations:

- A total of 708,365 consecutive hours have been worked by both divisions combined without a lost-time injury (LTI). Electric division employees contributed 605,896 of



those hours, with the last lost-time injury occurring on November 19, 2015. The water division reached 102,469 hours, with the last lost-time injury occurring on November 20, 2017.

- A total of 209,354 cumulative hours were worked company-wide during the period. 115 employees in the electric division worked 120,327 hours, and 82 employees in the water division worked 89,027 hours.
- In addition, a total of 434,827 cumulative vehicle miles were driven by employees in 117 vehicles. 175,166 of those miles were driven by electric division employees, and 259,661 miles were by water division employees. Vann pointed out the substantial amount of miles driven and zero accidents to date for this year takes a huge commitment by CU's vehicle operators.

The below data was provided as a comparison over the last four years:

Year	OSHA – RIR	DART	LTCR	VAR
2014	1.51	1.01	0	13.13
2015	3.51	2.01	0.5	6.84
2016	1.53	0.51	0	6.78
2017	4.04	2.53	1.01	2.29

Vann advised CU has had an outstanding year in safety thus far, and he is extremely happy with the progress made. Additionally, he stated the management and employees of CU do an excellent job of placing safety as a number one priority, not only for the company, but the public as well. Mayor Rowland praised CU. He said, "Based on the risks our employees take, the results are pretty amazing." Chairman Ector expressed appreciation to management and all of the workforce for the excellent record and focus placed on safety. In response to a question from Ector regarding what is being done with near miss data, Vann advised one of the initiatives he is working on is the tracking and trending of near miss/hit incidents. Investigations are conducted based on the reporting, which is highly encouraged at the employee level. Additionally, he is working on a program he hopes to have in place by next year for employees to report this type of information.

#### **Approval of Mass Mutual Self-Expiring Amendment**

In a recent audit by Mass Mutual, it was discovered inaccurate figures had been reported over the years on an employee who had recently requested a retirement estimate. This is a self-expiring amendment for the Mass Mutual Retirement Plan to allow an employee who withdrew his contributions to repay them with interest. This greatly benefits the employee and the pension amount he will draw at retirement. However, it has no impact financially on Cleveland Utilities or the Mass Mutual plan. When the deposit is made by the employee, the amendment opened for this case will expire. On motion by Chari Buckner and seconded by Mayor Tom Rowland, the Board of Public Utilities voted unanimously to approve the request allowing CU to sign this self-expiring Amendment for submission to Mass Mutual. The Addendum will read as follows: Contract holder, Central Service Association, Contract SA 12960-08, hereby requests Mass Mutual to prepare an amendment to the Plan Group 08 – Cleveland Utilities effective on July 1, 2018. Amend the plan to permit a participant who withdrew his Employee contribution in September 2005 to repay them with interest by September 1, 2018.

#### **Approval of Purchase Order to Cleveland Utilities OPEB c/o First Tennessee Bank**

On motion by Joe Cate and seconded by Vice Chairman Eddie Cartwright, the Utility Board took

action to approve a budgeted purchase order to Cleveland Utilities OPEB c/o First Tennessee Bank in the amount of \$657,923 for the annual funding of CU's OPEB Trust.

**Approval of Purchase Order to Volunteer Energy Cooperative (VEC)**

On motion by Vice Chairman Eddie Cartwright and seconded by Mayor Tom Rowland, the Board of Public Utilities voted unanimously to approve a purchase order to Volunteer Energy Cooperative (VEC) in the amount of \$254,677.45 for the purchase of electric facilities and revenue sales from VEC for properties annexed into the city limits on Urbane Road including the Omega Center and four other properties. This purchase is included in the FY 19 budget.

**Approval of Purchase Order to ABC Professional Tree Services, Inc.**

On motion by Mayor Tom Rowland and seconded by Chari Buckner, the Board of Public Utilities voted unanimously to approve a budgeted purchase order to ABC Professional Tree Services, Inc. in the amount of \$640,000 for projected costs for both hourly rate and tree removal rate totals for July 1, 2018 to June 30, 2019. This estimated total was calculated based on ABC's invoices supplied for the past six months. ABC was previously awarded the three-year vegetation management contract and submitted the low overall bid. Staff has been very pleased with the quality of ABC's work. CU has seen an increase in outage statistics due to trees, and ABC is doing a phenomenal job of obtaining the clearances needed. Vice Chairman Cartwright added a comment. He recently experienced a situation involving a tree across a line, and the service and professionalism of the responding CU crew was excellent.

**Approval of Purchase Order and Agreement with Murray Construction**

On motion by Mayor Tom Rowland and seconded by Joe Cate, the Board of Public Utilities voted unanimously to approve a purchase order and agreement with Murray Construction in the amount of \$111,377 for the Harriman Substation site work to include excavation, pad construction, temporary and permanent erosion control, rock inside the fence, topsoil and seeding. Murray Construction submitted the low bid with an acceptable timeframe for the work. The project is budgeted.

**Approval of Purchase Order to G&W Electric Company c/o Power Connections**

On motion by Chari Buckner and seconded by Vice Chairman Eddie Cartwright, the Utility Board took action to unanimously approve a purchase order to G&W Electric Company c/o Power Connections in the amount of \$57,948 for three G&W Viper Reclosers with SEL-651R controllers. These reclosers will replace manual circuit tie switches and become part of the distribution automation scheme. This is a sole source purchase based on standardization; however, Electric Division VP Borden has tasked his team to search for an equal competitor moving forward.

**Approval of Purchase Orders to Dell EMC & CDW-G**

On motion by Mayor Tom Rowland and seconded by Vice Chairman Eddie Cartwright, the Board of Public Utilities voted unanimously to approve a purchase order to Dell EMC for \$94,574.80 and a purchase order to CDW-G for \$75,234.23. Both purchases are for system hardware and software for the Disaster Recovery System Project to be installed at CU's Harrison Building site. The purchases are budgeted for FY 2019 and are being made under the State of Tennessee purchasing contract reference numbers WN31AGW and MNWNC-109 50436 with Dell and CDW-G. Richard Snyder provided additional details. Several years ago, CU began virtualization of every server feasible. Early in the process, it was realized an off-site disaster recovery plan was needed. In the event of a major disaster to the main campus or the facilities serving it, the majority of the day-to-day functions could be moved to the new building. A server file repository is included and would be ready in the event of an emergency. The project will be ongoing and evolving. Additionally, the

system will be a full-time available backup.

**Approval of Purchase Order to Central Service Association (CSA)**

On motion by Chari Buckner and seconded by Joe Cate, the Utility Board took action to approve a purchase order to Central Service Association (CSA) in the amount of \$142,660 for the purchase of a new Meter Data Management System (MDM). This purchase is budgeted and is a supplement to the master contract between Cleveland Utilities and Central Service Association. The meter readings from the AMI system are stored in the MDM. ElectSolve, the existing vendor, is getting ready to implement additional maintenance fees that would almost double the current cost. Overall, staff feels the CSA product is a better option due to cheaper yearly costs, it provides an engineering transformer loading analysis tool, has more capabilities and tighter integration. Initially, this product was not available.

**Approval of Purchase Order to Hampton Backhoe Service, LLC**

On motion by Mayor Tom Rowland and seconded by Vice Chairman Eddie Cartwright, the Board of Public Utilities voted unanimously to approve a purchase order to Hampton Backhoe Service, LLC in the amount of \$81,475 for the installation of 1,200 lineal feet of 6-inch ductile iron waterline along Parker Street NE from 8th Street to Central Avenue NE. The new ductile iron pipe will replace old cast iron pipe. CU will fund 60 percent and Lee University up to 40 percent. CU considered the project an emergency and utilized this contractor to expedite the project within the required timeframe. Funds are available in the FY 2019 budget to complete the project.

**Approval of Purchase Order to Hampton Backhoe Service, LLC**

On motion by Mayor Tom Rowland and seconded by Joe Cate, the Utility Board took action to approve a purchase order to Hampton Backhoe Service, LLC in the amount of \$135,040 for the installation of 4,886 lineal feet of 8-inch PVC waterline and one fire hydrant along Van Davis Road NW from Georgetown Road to Swafford Cemetery Road NW. The new line will replace an existing 4-inch waterline. The project is budgeted for FY 2019.

**Approval of Purchase Order to Angel Brothers Construction**

On motion by Joe Cate and seconded by Mayor Tom Rowland, the Board of Public Utilities voted unanimously to approve a purchase order to Angel Brothers Construction in the amount of \$81,190 for the installation of 3,392 lineal feet of 6-inch PVC waterline and three fire hydrants along Baugh Springs Trail and Banther Road SW. CU will fund \$20,500 of the project and the developers \$40,065 and Bradley County \$20,625. CU's portion of the project is budgeted for FY 2018.

**Approval of Purchase Order to Mayse Construction Company**

On motion by Chari Buckner and seconded by Vice Chairman Eddie Cartwright, the Utility Board took action to approve a purchase order to Mayse Construction Company in the amount of \$66,197.50 for the installation of 2,716 lineal feet of 6-inch PVC waterline and one fire hydrant along Van Davis Road to south of Morgan Road NW. The project is budgeted for FY 2019.

**OTHER BUSINESS**

**Future Board Meeting Dates**

Future, regularly scheduled board meeting dates at the Tom Wheeler Training Center are as follows:

Friday, August 24, 2018, 12:30 p.m.

Friday, September 28, 2018, 12:30 p.m.

Friday, October 26, 2018, 12:30 p.m.

Amy Ensley  
Board Secretary

[Signature]  
Board Chairman

August 24, 2018  
Date

**MINUTES OF REGULAR MEETING**  
**CLEVELAND UTILITIES BOARD**  
**AUGUST 24, 2018**

*The Board of Public Utilities met at 12:30 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; David May, Jr., Cleveland City Council; Tim Henderson, President/CEO; Bart Borden, VP Electric Division; John Corum, VP Administrative Services; Amy Ensley, Utility Board Secretary; Craig Mullinax, VP Water & Wastewater; Jan Runyon, Assistant VP Administrative Services; Marshall Stinnett, VP/CFO; Walt Vineyard, Executive VP; Tad Bacon, Traffic Signal Coordinator; Nathan Casteel, Engineering Technician I; and Tim Siniard, *Cleveland Daily Banner*. Following the Pledge of Allegiance to the American Flag, Tad Bacon delivered the invocation.

**MINUTES OF JULY 27, 2018**

On motion by Mayor Tom Rowland and seconded by Vice Chairman Eddie Cartwright, the Board of Public Utilities voted to approve the July 27, 2018, minutes as written.

**MANAGER'S UPDATE AND ANNOUNCEMENTS**

**Councilman David May, Jr.**

President/CEO Tim Henderson introduced and welcomed Councilman David May, Jr., from District 4, who was in attendance. Councilman May will serve on the Utility Board as the City Council representative and fill Mayor Rowland's seat upon his retirement. His first official board meeting will be September 28. Councilman May has been involved in longstanding service to the City of Cleveland. He served as the Chief of the Cleveland Fire Department for 14 years.

**Labor Day Holiday**

Cleveland Utilities will be closed on Monday, September 3, 2018, in observance of Labor Day. The Call Center will be open and regular emergency/standby services will be maintained 24/7.

**Report on Volleyball Tournament**

One of the CU teams finished in first place at the River Counties Association of Realtors "Volley for a Cure" Volleyball Tournament on Thursday, August 16, 2018. Both CU teams faced each other in the first match by a random draw, and it was single elimination. CU has won four of the previous five tournaments. All proceeds benefit the American Cancer Society.

**Annual Picnic**

Board members were invited to attend Cleveland Utilities' annual family picnic scheduled for Thursday, October 4, 2018, at Fletcher Park beginning at 5 p.m. This is the sixth year at this venue, and everyone seems to have a great time.

**Comment from Mayor Rowland**

Cleveland 101 recently held a panel discussion for parents of new students at Lee University. Customer Relations Supervisor Jamie Creekmore represented CU at the event and did a great job.

**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 September 2014 through September 2018 was reviewed. For the month of September, the residential retail electric rate will change to 9.879 cents per kilowatt-hour, a decrease of 2.34 percent over August's rate of 10.116 cents per kilowatt-hour. This rate change is driven by TVA's Fuel Cost Adjustment. As a continued trend, Cleveland Utilities will pass the TVA fuel cost rate adjustment to its consumers.
2. The June and July 2018 financial and statistical statements were presented to the Utility Board. During June, the cost of purchased power as a percentage of retail sales was 80.7 percent. The results for June 2018 are electric sales revenue of \$9,035,720, which was offset by a purchased power expense of \$7,287,419. This resulted in an operating margin of \$1,748,301. Operating expenses for the month were \$1,607,462. These revenue numbers were driven by a customer base of 31,726. The net income for June 2018 was \$307,910. Results for FY 2018 are electric sales revenue of \$99,384,785, which was offset by a purchased power expense of \$79,078,347. This resulted in an operating margin of \$20,306,438. Operating expenses for FY 2018 totaled \$18,488,432. This brings the division to a combined net income of \$3,761,584 for FY 2018 and can be compared to the budgeted amount of \$2,405,068.
3. During July 2018, the cost of purchased power as a percentage of retail sales was 74.5 percent. The results for the month were electric sales revenue of \$10,205,448, which was offset by a purchased power expense of \$7,605,162. This resulted in an operating margin of \$2,600,286. Operating expenses for the month were \$1,735,394 and can be compared to a budgeted operating expense of \$1,593,280. The division serviced 31,845 customers during July. Net income for the month was \$1,038,640.
4. For June 2018, water sales revenue was \$1,297,341. The division serviced 31,889 customers. Operating expenses for June totaled \$824,287. The division recorded an operating income of \$606,185. The results for FY 2018 are water sales revenue of \$14,387,101. Operating expenses for FY 2018 were \$14,402,526. The resulting operating income for FY 2018 totaled \$1,404,109 and can be compared to the budgeted amount of \$1,229,238.
5. For July 2018, water sales revenue was \$1,283,572. The division serviced 32,082 customers. Operating expenses for July were \$1,231,288. The division recorded an operating income of \$196,517, which can be compared to a budgeted operating income of \$234,995 for the month.
6. For June 2018, wastewater treatment revenue was \$1,051,791. The division serviced 19,056 customers. Operating expenses for the month were \$763,054 and can be compared to a budgeted amount of \$966,718. An operating income of \$438,465 was recorded. The results for FY 2018 are wastewater treatment revenue of \$12,308,185. Operating expenses for FY 2018 were \$11,135,002. The resulting operating income for FY 2018 totaled \$2,224,417.
7. For July 2018, wastewater treatment revenue was \$1,027,147. The division serviced 19,167 customers. Operating expenses for the month were \$960,729. An operating income of \$169,293 was recorded, compared to budgeted operating income of \$145,346.
8. The external auditors have been onsite for the past two weeks. A letter was submitted to the Board by the CPA accounting firm of Arnett, Kirksey, Kimsey, Sullivan, Lay & Hall, PLLC, notifying they are in the audit process. Their field work was completed this week, and the final audit report is anticipated to be available at the October board meeting.

## **Electric Division**

Bart Borden reported on the following:

1. The steel poles for the Spring Branch Industrial Park Innovation Drive Distribution Lines Project were delivered on site. All pole locations are being staked and construction should begin very soon.
2. In reference to the East Cleveland 69 kV Bus Breaker Addition Project, the 69 kV bus breaker has been received and personnel are working with the consultant to complete the control drawings.
3. The North Ocoee Street LED Street Lighting Conversion Project still remains on hold awaiting TDOT approval for the lighting design.
4. All necessary changes to the electric service at Lake Forest Middle School have been completed which include removal of the primary metering, downsizing of the 3-phase pad-mount transformer to the buildings that were demolished; and those remaining. The project was quite involved and required a lot of coordination with CU's engineering and operations personnel and the electrical contractor. Borden expressed appreciation to all who worked on the project to make it a success.
5. Engineering released a work order to replace the wildlife guards nearing their end of life at Mars Chocolate Substation on Peerless Road. The guards help protect from unwanted outages from wildlife contact such as squirrels, raccoons, snakes, etc. Staff has been very pleased with the performance of the equipment. Outages due to wildlife were experienced at this particular substation prior to the original installation in 2004; however, there have not been any since.
6. Engineering released a work order to install the underground electric facility installation for Phase 2 of Stone Creek Subdivision on New Murraytown Road consisting of 18 lots toward the front of the development. A total of 560 feet of underground primary, 782 feet of underground secondary and one, 75 kVA pad-mount transformer will be installed. An existing 75 kVA transformer installed in Phase I construction will serve the additional lots as well. The work order has been approved and released, but the developer has not begun the conduit installation. It is anticipated the conduit will be installed by the end of this month.
7. The Operations Department requested bids for the removal of the three power transformers at CU's East Cleveland delivery substation. A bid tabulation sheet for the sale of the units was reviewed. Four bids were received with Solomon Corporation being the high bidder at \$123,378, next was Asset Management Solutions at \$72,770, then TCI of Alabama at \$63,900 and TRC America at \$49,910.25. Solomon was awarded the project and has already made payment. They will remove the transformers prior to the arrival of the new units.
8. An update was presented for the Distribution Automation Project. A diagram was reviewed representing two substation circuits with three overhead switches that work together to auto-heal the system when a fault occurs. Several photographs of the equipment were provided. The SCADA communications equipment allows constant control, status and telemetry monitoring of the substation equipment. CU's new Schweitzer Engineering Laboratories Distribution Automation Control equipment operates in series with the SCADA system to isolate faults on the system and restore power to sections unaffected by the fault. The system monitors loads and verifies the ability of the system to self-heal, keeping the lights on for more customers. CU has installed three overhead line switches. Additionally, the

communications protocol files are having to be remapped in all the substations so they are the same. This process is very involved and takes time.

9. A performance review meeting was held with personnel from engineering, operations and the call center. After numerous summer storms were experienced and with the opening of the new call center, staff reviewed procedures, calls handling with the outage management system, additional training needed, personnel assignments, areas where improvements could be made, as well as successes. There were no major problematic issues, only ones that would improve the level of service to customers. The meeting was extremely productive and very informative.
10. An informative PowerPoint presentation was given on system reliability and infrared/camera inspections conducted with the new DJI Matrice 210 Drone. This particular drone has two cameras: a thermal infrared camera and a regular photo-type camera. Temperature differentials of the equipment can be measured with the photographs taken. Images captured during the inspection were shown. Several problems were identified including a lightning arrester with cracks in the top of the casing from getting too hot that would have failed, a cracked insulator which likely would have locked the breaker out eventually, a hot connector on a transformer, as well as 32 rotten pole tops (9 poles will require total replacement). A total of 7.2 miles of lines and 257 poles were inspected by CU's licensed drone pilots, Nathan Casteel and Jeff Luther. They covered 38,000 linear feet in an estimated four hours or eight total man hours, and it took roughly one hour to examine the photographs. A cost analysis was conducted, and this same work would take a lineman 86 hours for a total of 172 man hours for two linemen. The cost savings on this inspection alone was almost \$24,000. Borden expressed appreciation to Casteel and Luther for this work.
11. An update was presented on traffic lighting:
  - Traffic Signal Coordinator Tad Bacon prepared an estimate to retrofit the existing pedestrian signals at Dalton Pike and McGrady Drive with the Accessible Pedestrian Signals (APS) style. These signals vibrate and have audio commands. Currently, TDOT requires this type on new installs and the Manual for Uniform Traffic Control Devices (MUTCD) will likely require them for new installs in the upcoming addition. The estimate of \$48,678 includes all material, labor, overheads and equipment. The request to retrofit this intersection was made by members of the local chapter of the National Federation of the Blind. The city informed Bacon they will pursue funding through a grant process.
  - Bacon shared challenges faced in his role, as well as improvements that have been made and plans moving forward. Signal timing and programming are the core of his basic job responsibilities; however, there are a lot of other tasks and duties required to operate a safe and reliable network of 88 traffic signals. At each location, there are traffic cabinets housing multiple components requiring programming and firmware updates that have to be completed on a routine basis to keep the system functioning.

Other responsibilities include updating the GIS maps, maintaining multiple logs (both on and offsite) that store critical information, updating written specifications for cabinets and proprietary products, ensuring clearance intervals meet the ITE formula at all intersections (after 20 years of remaining the same, this formula was recently



updated and will impact a few of CU's larger intersections; therefore, those will be revisited).

CU does have some communications in place for the traffic system. Around 50 percent of the traffic controllers are on the Ethernet network and they communicate back to a central system. This technology allows the capability to remotely perform updates and receive alarms. Naturally, some of the updates require actual site visits. CU also has eight cameras in place that can be utilized from the office.

A couple of variables impacting travel time outside of CU's control are roadway capacity and interrupted flow from access points along roadway networks. CU works with local and state officials to get those necessary improvements and regulations, in conjunction with the correct signal timing, to ensure a safe and reliable network. Mayor Rowland expressed appreciation to Bacon. He said, "We have come a long way since you have taken over the traffic signalization. I appreciate it so much. You have done a great job."

In response to a question from Chairman Ector concerning hacking, Borden advised CU's network is on an island and not connected outside the traffic network, so it is more secure. Vineyard informed there are several protective measures in place to prevent access. Vice Chairman Eddie Cartwright asked who the responsible party is for the crosswalk at Lee University, as there have been issues at this location. Councilman May advised Public Works and stated he would inform Tommy Myers. Additionally, board member Buckner advised it appears more pedestrians are walking and asked if there have been additional requests for pedestrian access to certain intersections. Bacon advised there does seem to be a trend with more pedestrians walking these days. He thinks the greenway has attributed to this and there could be more requests for the APS technology moving forward. It is a very new technology and expensive.

### **Water Division**

Craig Mullinax reported on the following:

1. The Headworks Rehabilitation Project at the Wastewater Treatment Plant (WWTP) is 99 percent complete. Photographs of the major project components and screening process were viewed. The contract amount is \$1,023,550.
2. Construction for the new maintenance building at the WWTP has began. TriCon has completed three percent of the project.
3. The Flocculation/Sedimentation Basin Improvements Project at the Cleveland Filter Plant (CFP) is underway and approximately 10 percent complete. Starting Monday at 6 a.m., plans are to start bypassing the raw water to the head of the treatment process. The CFP will shut down for approximately four hours. Hiwassee Utilities Commission (HUC) will provide any additional water needed during this time. The bypassing process will take about four weeks. Pictures were shown to give a better understanding of what the project will entail.
4. The Raw Water Pump Station Project at the CFP is ongoing. The electrical improvements and valving are 95 percent complete, and the building improvements are around 50 percent complete.

5. The upgrade of the carbon feeder equipment at the CFP is complete at a total contract amount of \$59,300.
6. Updated pictures showing progress of the Georgetown Road Water Storage Tank, Booster Pump Station and Water Main Extension Project were viewed. The construction of the water tank, water mains and pump station are all around 95 percent complete. The 500,000 gallon tank is 50 feet high and 41 feet in diameter. Once the station is energized, the tank will be filled with water, bacteriological tested and then placed in service.
7. Angel Construction is expected to start the Baugh Springs Trail & Banther Road Water Main Extension Project next week. The project will consist of 3,392 feet of 6-inch water main and three fire hydrants.
8. Hampton Backhoe completed the Savannah and Spring Street Water Main Replacement Project at a total contract amount of \$201,550. The extra cost of \$7,820 was due to rock excavation.
9. Hampton Backhoe completed the Parker Street Water Main Replacement Project between 8<sup>th</sup> Street and Central Avenue this week. Mullinax commended Hampton Backhoe for their outstanding work.
10. Two letters were reviewed from the State Revolving Fund (SRF) regarding the 2010 Annexation Sewer Project on APD 40. On July 11, 2018, an approval letter was received notifying CU the request of \$1,350,000 was approved. The first loan is \$1,000,000 with \$100,000 in loan forgiveness, and the second loan is for \$350,000. Both loans will have an interest rate of 1.56 percent for 20 years. On July 19, 2018, an approval letter was received notifying the plans have been approved and construction can begin. A bid date of September 20, 2018, has been set.
11. Hampton Backhoe has completed 90 percent of the sewer main installation and 50 percent of both water main installations for Stone Creek, Phase 2, on New Murraytown Road. The project comprises 858 feet of 8-inch sewer main, 690 feet of 6-inch water main and 177 feet of 2-inch water main. Dennis Epperson is the developer.
12. An update was provided for the ongoing Wastewater Rehabilitation Project:
  - Westco is performing clearing along sewer main easements. They have been clearing for a month and have completed approximately 25,000 feet or 4.7 miles (68 percent) of a total of 36,750 feet or 7 miles of easement area.
  - In reference to Phase 1 of the Basin 10A-8 Rehabilitation & Basin 64-14A SSES Project, manhole inspections are 95 percent complete. Some have been paved over and those are on hold until they can be raised. Smoke testing was delayed this summer due to wet conditions. S&ME is assisting with the 10A-8 Rehab Project as necessary.
  - Phase I of the Basin 10A-8 Rehabilitation Project is underway. Portland Utilities has continued pre-televising sewer mains and have been performing point repairs. Lining was performed on Parker Street as part of road realignment. Insituform is scheduled to begin lining on August 27.
13. The Meter Department set 35 meters through July 2018 compared to 32 for July 2017 and 44 for July 2016. Of the 35 meter sets, 28 were single-family homes, 6 were commercial and 1 was irrigation.
14. As of August 21, 2018, a total of 5.34 inches of rainfall has been recorded at the CFP for this month. Even with the higher amount of rainfall in comparison to the last two years, water demand is still strong for this time of year.

## **NEW BUSINESS**

### **Resolution to Issue Debt**

On motion by Mayor Tom Rowland and seconded by Joe Cate, the Board of Public Utilities voted unanimously approving and recommending resolutions for the issuance by the City of Cleveland of \$2,500,000 in General Obligation Bonds/Loans for improvements and extensions of the Electric System (primarily for the expenditure for the East Cleveland Substation power transformers); and \$3,500,000 in General Obligation Bonds/Loans for the purpose of improving and extending the Water System (Cherokee Gateway Water Storage Tank, flocculation and sedimentation basin improvements and other capital improvements). Both resolutions will be submitted to the City Council for approval. CU is requesting the issuance of 20-year, fixed rate notes.

### **Resolution to Honor Mayor Tom Rowland's Retirement**

On motion by Vice Chairman Eddie Cartwright and seconded by Chari Buckner, the Utility Board voted unanimously to adopt a resolution recognizing and honoring Mayor Rowland's retirement, signifying 27 years of faithful service to Cleveland Utilities. A plaque of the resolution was read aloud by President CEO Henderson and presented to Mayor Rowland as a small token of the Board's great admiration and respect. Everyone congratulated Mayor Rowland on this momentous occasion. Mayor Rowland said, "What makes CU is the workers on the front line that make everything happen. They are all professionals, which I have always appreciated, as well as the great leadership."

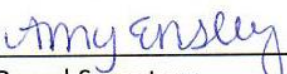
## **OTHER BUSINESS**

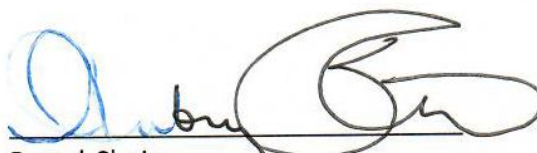
### **Future Board Meeting Dates**


Future, regularly scheduled board meeting dates at the Tom Wheeler Training Center are as follows:

Friday, September 28, 2018, 12:30 p.m.

Friday, October 26, 2018, 12:30 p.m.

  
Board Secretary

  
Board Chairman

  
Date

**MINUTES OF REGULAR MEETING**  
**CLEVELAND UTILITIES BOARD**  
**SEPTEMBER 28, 2018**

*The Board of Public Utilities met at 12:30 p.m. at the Tom Wheeler Training Center.*

Present were the following: Aubrey Ector, Chairman; Eddie Cartwright, Vice Chairman; Joe Cate, Cleveland Utilities Board; Chari Buckner, Cleveland Utilities Board; David May, Jr., Cleveland Utilities Board; Tim Henderson, President/CEO; Bart Borden, VP Electric Division; John Corum, VP Administrative Services; Amy Ensley, Utility Board Secretary; Craig Mullinax, VP Water & Wastewater; Jan Runyon, Assistant VP Administrative Services; Marshall Stinnett, VP/CFO; Walt Vineyard, Executive VP; Jamie Creekmore, Customer Relations Supervisor; Wanda Jordan, Customer Service Representative; Shane Lawson, Customer Data Manager; James Ledford, Class IV Operator; Barry Maples, Treatment Facilities Manager; Mike Ward, Wastewater Treatment Plant Supervisor; David Yost, GIS Director; and Tim Siniard, *Cleveland Daily Banner*. Following the Pledge of Allegiance to the American Flag, Wanda Jordan delivered the invocation.

**MINUTES OF AUGUST 24, 2018**

On motion by Vice Chairman Eddie Cartwright and seconded by Chari Buckner, the Board of Public Utilities voted to approve the August 24, 2018, minutes as written.

**MANAGER'S UPDATE AND ANNOUNCEMENTS**

**Website Update Overview**

President/CEO Tim Henderson advised Cleveland Utilities' website has been updated as part of the ongoing efforts to improve services to customers. Henderson introduced and commended Customer Data Manager Shane Lawson who was instrumental in this endeavor. Lawson then provided an overview of the revamped site which went live this morning. The new site uses wire framed technology and has a navigation structure very similar to the previous site allowing familiarity for customers. In addition, it is content management driven which allows various users to manage and update content on a regular basis. CU's website receives a considerable amount of traffic. There are around 18,000 to 20,000 hits as well as an estimated 13,000 customers that pay online monthly. Staff is excited about the modern look and ability to better serve customers.

**Annual Picnic Reminder**

Board members were reminded of the upcoming Cleveland Utilities' annual family picnic scheduled for Thursday, October 4, 2018, at Fletcher Park beginning at 5 p.m.

**Columbus Day Holiday**

Cleveland Utilities will be closed on Monday, October 8, 2018, in observance of Columbus Day. The Call Center will be open and regular emergency/standby services will be maintained 24/7.

**Wastewater Treatment Plant (WWTP) Operational Excellence Award**

The Kentucky-Tennessee Water Environment Association bestowed the Operational Excellence Award to Cleveland Utilities for continued outstanding operation of the Wastewater Treatment Plant (WWTP) during the period of January 1, 2017 through December 31, 2017. Henderson praised the staff at the Wastewater Treatment Plant for this outstanding accomplishment as it is very difficult to achieve. In attendance for this special recognition were Barry Maples, Manager of Treatment Facilities; Mike Ward, Wastewater Treatment Plant Supervisor; and James Ledford, Class IV Operator.

Barry Maples expressed appreciation to Mike Ward and all the WWTP staff for their expertise and dedication. The sampling and testing that must be conducted on a daily basis and the fact it is done with very few mistakes or violations is unbelievable. Maples also acknowledged Steve Barger, Lisa Coffey and Chris Wilds for their leadership, diligence and being environmentally conscious. The health and welfare of the Cleveland and Bradley County citizens is dependent upon the successful operation of the plants. Maples advised the water put back into the Hiwassee River is cleaner than when it was taken out.

Mike Ward advised the achievement of this award is significant as very stringent criteria must be met. The WWTP has received this award for seven of the past ten years, and the few years the plant did not receive it, only two or three samples were missed. The National Pollutant Discharge Elimination System (NPDES) permit contains 3,833 individual requirements that must be in compliance during the year. To qualify for this award, the utility is allowed only one exceedance, and CU had zero during 2017, which is extremely hard to do. This is a testament of the staff at the Wastewater Treatment Plant operating the plant 24/7. Ward commended them on this impressive achievement. He stated, "We share this award with operations, maintenance and environmental compliance. It is truly a community award." He then presented the award to Class IV Operator James Ledford who has 39 years of dedicated service to CU and 24 years of consecutive perfect attendance. The Operational Excellence Award is conferred to recognize the dedication, resolve, and outstanding effort of the employees of this facility by having no more than one violation of its NPDES Permit limit for the 12-month reporting period. Ledford then addressed the staff and board. He stated he is proud to be an employee of CU and grateful for his job.

## **DIVISION REPORTS**

### **Financial**

Marshall Stinnett reported on the following:

1. Stinnett began by congratulating the employees of the WWTP on the Operational Excellence Award. In addition, Stinnett acknowledged the help and assistance provided to him by Ward and all plant personnel over the past several years.
2. A chart tracking the kilowatt-hour cost in residential retail electric rates for the months of October 2014 through October 2018 was reviewed. For the month of October, the residential retail electric rate will change to 9.159 cents per kilowatt-hour, a decrease of 7.29 percent over September's rate of 9.879 cents per kilowatt-hour. This rate change is driven by TVA's Fuel Cost Adjustment, the Grid Access Charge (GAC) as well as the change of rate season to the transition rates. As a continued trend, Cleveland Utilities will pass the TVA fuel cost rate adjustment to its consumers.
3. The August 2018 financial and statistical statements were presented to the Utility Board. During August, the cost of purchased power as a percentage of retail sales was 78.0 percent and can be compared to the budgeted percentage of 78.7 percent for FY 2019. The results for August 2018 are electric sales revenue of \$9,641,678, which was offset by a purchased power expense of \$7,520,478. This resulted in an operating margin of \$2,121,200. Operating expenses for the month were \$1,886,044. These revenue numbers were driven by a customer base of 31,887. The net income for the month was \$398,750.
4. For August 2018, water sales revenue was \$1,301,086. The division serviced 32,097 customers. Other revenue sources contributed an additional \$156,708 for the month.

Operating expenses for August totaled \$1,281,796. The division recorded an operating income of \$175,998.

5. For August 2018, wastewater treatment revenue was \$1,055,405. Other revenue sources contributed an additional \$95,044 for the month. The division serviced 19,194 customers. Operating expenses for August were \$949,965. This is compared to the budgeted amount of \$980,656. The division recorded an operating income of \$200,484, which is compared to a budgeted operating income of \$155,070 for the month.
6. As a reminder, the GAC will be included on customer bills beginning in October.

### **Electric Division**

Bart Borden reported on the following:

1. During the pole location staking process for the Spring Branch Industrial Park Innovation Drive Distribution Lines Project, it was determined several of the final grade elevations were different than the ones provided with the construction plans. The line design was based on the elevations provided in the construction plans; therefore, the pole heights for nine poles had to be changed. Fortunately, the required steel poles were able to be obtained with a 6-week delivery. Crews were able to begin construction of the lines on Harriman Road by shifting some of the poles from inside the park. They will continue framing and setting poles inside the park; however, the conductor will not be installed inside the park until the additional new poles are received. The poles not used on this project will become stock poles and used on future projects.
2. In reference to the East Cleveland 69 kV Bus Breaker Addition Project, the breaker foundations have been poured, control conduits are being installed and control wiring will be pulled in. An outage at East Cleveland Delivery Substation is being scheduled to install the isolation switches, set the new breaker and connect the control wiring.
3. Due to the complexity and long delays with the TDOT approval process concerning the North Ocoee Street LED Street Lighting Conversion Project, the decision was made to shift the project location to Peerless Road. Cleveland Utilities has been requested to investigate the lighting at the Norman Chapel Road and Cleveland High School crosswalk. By shifting the project to Peerless Road, the lighting project can be combined with the analysis of the crosswalk lighting.
4. The Substation Maintenance Department completed installation of the large vehicle wash recovery system to separate oils from the wash water, which meets EPA standards. This was part of the expansion project for CU's Maintenance Building. The paint booth has also been installed and currently being used. Several photographs were viewed. The 2,000 kVA pad-mount transformer pictured shows the effectiveness of the booth and the filtering system. Personnel are very pleased with the booth's operation and the finished product. This equipment will extend the life of CU's transformer facilities and result in great savings.
5. An update was reported for the Distribution Automation Project. In last month's report, a map was presented showing the required new overhead distribution system equipment and substation equipment. Line crews have installed the required three pole-mounted reclosers, and engineering and operations technical staff remapped the SCADA points at both Mouse Creek and Fletcher Substations to a standard layout that will be used at all CU substations over the entirety of the project. They are presently working on communications between the devices and testing of the communications and points.

6. The disassembly of the failed power transformer and transformers being replaced due to age at CU's East Cleveland Delivery Substation went very well. Solomon Corporation disassembled all three transformers on site. The next step was to relocate the remaining B phase power transformer to the spare transformer position (this spare is also utilized by TVA). B and B Crane of Chattanooga went through the set up process of two cranes to position and move this transformer. The relocation work was completed yesterday. Photos of this process were reviewed. CU is now in a position to receive the new power transformers. In addition, the test reports were received yesterday and staff is in the process of verifying those, which currently look good.
7. Two distribution circuits were flown and inspected with the drone. The first circuit, L-224, consisted of 197 poles at a cost of \$1,706.36 with the drone which is compared to a total of \$20,016.48 if linemen had conducted the inspection. This circuit resulted in a savings of \$18,310.32. Other pertinent information from the inspection of L-224 is below:

Number of poles inspected	197	Number of CU poles with issues corrected	6
Number of CU poles with issues	12	Number of bad CU poles	3
Number of AT&T poles with issues	0	Number of bad AT&T poles	0
Number of CU Poles Okay	3		
Number of AT&T Poles Okay	0		

The inspection of circuit D-214 included 825 poles at a cost of \$4,089.46 to inspect with the drone which is compared to a total of \$83,402.00 if linemen had completed the same work. This circuit resulted in a savings of \$79,312.54. Other relevant data from the D-214 inspection is as follows:

Number of poles inspected	825	Number of CU poles with issues corrected	49
Number of CU poles with issues	76	Number of bad CU poles	17
Number of AT&T poles with issues	5	Number of bad AT&T poles	2
Number of CU Poles Okay	14		
Number of AT&T Poles Okay	0		

Borden advised he is very pleased with this process, the associated savings and being able to quickly address issues. The drone could open areas for potential assistance. Additionally, there are a number of uses the drone can be utilized for, and the Water Division is exploring different applications in which to use it as well. It will be beneficial utility wide.

8. A report was presented regarding traffic lighting:
  - A work order to install LED signals at Inman and Church Streets has been issued to the metering and traffic lighting area. The installation will occur after all material is delivered, which is anticipated to be mid-October.
  - CU's traffic signal coordinator programmed the newly installed Opticom GPS preemption equipment at APD-40 and Westland Drive. This will serve all equipped fire trucks at this intersection and was installed due to the proximity of the new Fire Hall #6 on Westland Drive. Also, the new Engine #3 was equipped and programmed for use with the preemption network.

### **Water Division**

Craig Mullinax reported on the following:

1. The Headworks Rehabilitation Project at the Wastewater Treatment Plant (WWTP) is essentially complete. The new screens have been a tremendous improvement and are making a big difference in the treatment process.
2. The new maintenance building at the WWTP is under construction and approximately 5 percent complete. TriCon has prepared the pad for the concrete to be poured. All conduits and piping have been installed.
3. The Flocculation/Sedimentation Basin Improvements Project at the Cleveland Filter Plant (CFP) is ongoing and approximately 40 percent complete. Haren Construction is doing a fantastic job with the different dynamics occurring. The 18-inch temporary raw waterline has been removed, and the new 20-inch raw water piping and four 20-inch control valves have been installed that feed the flocculation basins. Starting at 8 p.m. tonight, there will be another shutdown of the plant where Haren will begin removing the venturi meter and 20-inch valve and installing new equipment. A 6-inch tap was made on the 20-inch raw water line to bleed off any water to minimize it from entering the facility during this time. They will continue until the work is complete which should be tomorrow around noon when the plant can be brought back online. Hiwassee Utilities Commission (HUC) will provide any additional water needed during this time.
4. The Georgetown Road Water Storage Tank, Booster Pump Station and Water Main Extension Project is nearing completion. Volunteer Energy has completed installation of the electrical transformer at the booster station and tank site. The grading and placement of stone around the tank are complete, and the driveway to the tank has been paved. A tentative date for the pump station startup is set for October 3 & 4. The tank still has to be sterilized.
5. The Baugh Springs Trail & Banther Road Water Main Extension Project consisting of 3,392 feet of 6-inch water main and three fire hydrants is complete.
6. The Van Davis Road Water Main Extension Project (south of Morgan Road) is 70 percent complete.
7. A new project on Varnell Road SW to near Blackfox Road consisting of 850 feet of 8-inch waterline extension will be bid in the near future.
8. The 2010 Annexation Sewer Project on APD-40 will be presented under new business.
9. The following plans are under review:
  - Fulbright Crossing on Fulbright Road consisting of 2 triplexes, 15 townhomes and 376 feet of 8-inch sewer main.
  - Bradley Place at Bradley Square Mall comprising 11 retail spaces. The project will include relocating a 10-inch water main, and the sewer is still being determined.
10. The following developments under construction are nearing completion:
  - The Enclave at Weeks Drive consisting of 58 lots and 2,173 feet of 8-inch water main and 1,800 feet of 8-inch sewer main.
  - The Heartland Subdivision on Tasso Lane comprising 73 lots and 2,352 feet of 8-inch water main and 2,885 feet of 8-inch sewer main.
  - Stone Creek, Phase 2, on New Murraytown Road which includes 16 lots, 858 feet of 8-inch sewer main, 690 feet of 6-inch water main and 177 feet of 2-inch water main.
11. An update was provided for the ongoing Wastewater Rehabilitation Project:



- Westco is performing clearing along sewer main easements. They have been clearing for six weeks and have cleared approximately 29,000 feet or 5.5 miles of a total of 36,750 feet or 7 miles of easement area.
  - Phase I of the Basin 10A-8 Rehabilitation Project is underway. Lining began in August and will continue into October. Portland Utilities has completed 5,500 feet of mainline rehabilitation and 15 service lateral rehabilitations during this period.
12. The Meter Department set 22 meters through August 2018 compared to 30 for August 2017 and 39 for August 2016. Of the 22 meter sets, 18 were single-family homes, 3 were townhomes and 1 was commercial.
  13. As of September 27, 2018, a total of 7.69 inches of rainfall has been recorded at the CFP for the month. A total of 6.51 inches have occurred over the past four days. Even with the higher amount of rainfall, demand has still been strong.
  14. A chart was reviewed comparing projects utilizing funding through the State Revolving Fund (SRF) versus the traditional bond market. To date, eleven projects have been funded through the SRF with interest rates ranging from 1.11 percent to 2.91 percent. The program provides low interest rates for 20-year terms. This equates to a cost savings in interest alone of \$7,394,720.74 for the eleven projects. In addition, the total savings through loan forgiveness amounts to \$1,969,622 for a total realized savings of \$9,364,342.74. Mullinax commended his personnel for utilizing this resource. Henderson stated this is one way to best utilize funds to benefit the rate payers.

## **OLD BUSINESS**

### **TVA Rate Increase**

The TVA Board approved a 1.5 percent wholesale rate adjustment effective October 1, 2018. Per Cleveland Utilities' FY 2019 Budget and at the recommendation of Cleveland Utilities' management, Chari Buckner motioned and David May, Jr. seconded for the Board of Public Utilities of Cleveland, TN, to approve this wholesale rate adjustment as a pass through to all CU customers. The quorum carried the motion. Vice Chairman Eddie Cartwright exited the room just prior to the introduction of this item and was not present during the vote, but reentered just after.

### **Wilder Contracting LLC Change Order**

On motion by David May, Jr. and seconded by Vice Chairman Eddie Cartwright, the Utility Board voted unanimously to approve a change order with Wilder Contracting, LLC concerning the 2018 Building Renovation Project. The change order addresses renovations to the Water Administration Building which was included in the original bid as Alternate #4 consisting of a new stone awning, a stone veneer tower & stone veneer planter. Additionally, it will include painting of the siding and trim at the Water Administration Building, Sewer Maintenance Building, TWTC and Power Service Center, as well as the installation of a new masonry directional sign at the Power Service Center. The improvements for the Water & Wastewater Buildings total \$83,526, and the change order amounts for the Power Service Center and TWTC total \$22,041. This results in a change order total of \$105,567 and will increase the contract amount from \$709,084 to \$814,651. The project still falls within the budgeted amount for all divisions.

### **CSL Services, Inc. Contract**

On motion by Vice Chairman Eddie Cartwright and seconded by Chari Buckner, the Board of Public Utilities took action to approve a contract with CSL Services, Inc., in the amount of \$109,000 for long term flow monitoring of 17 flow meters, which includes annual maintenance, data collection and

reporting (Flow monitoring is a tool used to help determine where inflow is occurring and if you are eliminating it. CU has been under contract for the last five years with CSL Services, Inc.). Their annual unit prices remain the same for the last four years. The monitoring is budgeted for FY 2019 in the amount of \$110,000.

## **NEW BUSINESS**

### **B&W Contractors Inc. Purchase Order**

On motion by Chari Buckner and seconded by Vice Chairman Eddie Cartwright, the Utility Board took action to approve a purchase order with B&W Contractors Inc. d/b/a/ Cherokee Construction in the amount of \$53,328 for the WWTP Washer/Compactor Site Improvements. The project will expand the concrete pad supporting the washer/compactor. A removable platform will be installed to safely access the diverter slide gates for operation and maintenance. The project is an addition to the Headworks Rehabilitation Project which is budgeted for FY 2018 in the amount \$1,173,318. The projected overage for the project should be \$74,560.

### **K. Berry Construction Purchase Order**

On motion by David May, Jr. and seconded by Joe Cate, the Board of Public Utilities voted to approve a purchase order with K. Berry Construction in the amount of \$60,369 for the rehabilitation of Spiral Lift Pump No. 203 located at the WWTP. The project is budgeted for FY 2019 in the amount of \$45,000.

### **Resolution – Mayse Construction Company**

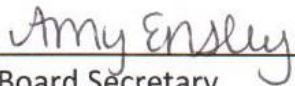
On motion by Joe Cate and seconded by Chari Buckner, the Utility Board unanimously approved a resolution authorizing the President/CEO of Cleveland Utilities to enter into a contract with Mayse Construction Company in the amount of \$1,478,238 for the installation of 3,551 lineal feet of 2-inch HDPE low pressure sewer pipe, 9,175 lineal feet of 8-inch PVC gravity sewer pipe, 330 lineal feet of 8-inch ductile iron pipe in a 16-inch casing, and 59 manholes as part of the 2010 Annexation Sewer Extension Project at APD 40. The project will be funded by SRF Loan No. CW6 2018-415/SRF 2018-416 in the amount of \$1,350,500. \$100,000 will be in loan forgiveness, at an interest rate of 1.56 percent over 20 years. This project is budgeted for FY 2019 in the amount of \$1,200,000. CU will be requesting an additional \$380,000 from SRF to fund the project.

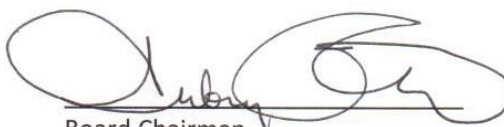
## **OTHER BUSINESS**

### **Future Board Meeting Dates**

Future, regularly scheduled board meeting dates at the Tom Wheeler Training Center are as follows:

Friday, October 26, 2018, 12:30 p.m.

  
Board Secretary

  
Board Chairman

10-26-2018

Date

**MINUTES OF REGULAR MEETING**  
**CLEVELAND UTILITIES BOARD**  
**OCTOBER 26, 2018**

*The Board of Public Utilities met at 12:30 p.m. at the Tom Wheeler Training Center.*

Present were the following: Aubrey Ector, Chairman; Eddie Cartwright, Vice Chairman; Joe Cate, Cleveland Utilities Board; Chari Buckner, Cleveland Utilities Board; Councilman David May, Jr., Cleveland Utilities Board; Tim Henderson, President/CEO; Bart Borden, VP Electric Division; John Corum, VP Administrative Services; Amy Ensley, Utility Board Secretary; Craig Mullinax, VP Water & Wastewater; Jan Runyon, Assistant VP Administrative Services; Marshall Stinnett, VP/CFO; Walt Vineyard, Executive VP; and Tim Siniard, *Cleveland Daily Banner*. Following the Pledge of Allegiance to the American Flag, Greg Clark delivered the invocation.

**MINUTES OF SEPTEMBER 28, 2018**

On motion by Vice Chairman Eddie Cartwright and seconded by Chari Buckner, the Board of Public Utilities voted to approve the September 28, 2018, minutes as written.

**MANAGER'S UPDATE AND ANNOUNCEMENTS**

**Offices Closed-Veterans Day & Thanksgiving Holidays**

Cleveland Utilities will be closed on Monday, November 12, 2018, in observance of Veterans Day and on November 22 & 23, 2018, in recognition of Thanksgiving. The Call Center will be open and regular emergency/standby services will be maintained 24/7.

**Veterans Day Appreciation Luncheon**

Administrative Services VP John Corum announced CU will be having its first annual Veterans Day Luncheon on Thursday, November 8, 2018, at 12 p.m. to recognize employees who have served in the US Armed Services. Mayor Kevin Brooks will be delivering the invocation, and Josh Roe from News Channel 9 will be the guest speaker. Board members were invited to attend. Henderson commended Corum for spearheading this special event to recognize those employees for their service to our country.

**Hurricane Michael Mutual Aid Assistance**

On October 9, Cleveland Utilities dispatched a 4-man crew to the Tallahassee area where they spent nearly two weeks assisting with the Hurricane Michael power restoration efforts. An additional 4-man crew left on October 21 to relieve the original crew and are helping West Florida Cooperative in Sneads, Florida. Henderson stated CU is glad to help when able to do so. The linemen enjoy helping in times of need, and it also lends opportunities to gain some useful experience. The mutual aid requests are coordinated through the Tennessee Valley Public Power Association (TVPPA). Electric Division VP Borden advised this type of work is extremely dangerous. At the same cooperative where CU crews are currently working, three line workers were struck by a vehicle and all three perished as a result of the tragic accident. Two of the linemen were employed by another utility company who were there providing aid, and the third was an employee of West Florida Cooperative. He asked for everyone to remember all involved.

**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 November 2014 through November 2018 was reviewed. For the month of November, the residential retail electric rate will change to 9.408 cents per kilowatt-hour, an increase of 2.72 percent over October's rate of 9.159 cents per kilowatt-hour. This rate change is driven by TVA's Fuel Cost Adjustment and the Grid Access Charge (GAC). As a continued trend, Cleveland Utilities will pass the TVA fuel cost rate adjustment to its consumers.
2. The September 2018 financial and statistical statements were presented to the Utility Board. During September, the cost of purchased power as a percentage of retail sales was 78.0 percent and can be compared to the budgeted percentage of 78.7 percent for FY 2019. The results for September 2018 are electric sales revenue of \$8,739,844, which was offset by a purchased power expense of \$6,816,326. This resulted in an operating margin of \$1,923,518. Operating expenses for the month were \$1,734,234. These revenue numbers were driven by a customer base of 31,605. The net income for the month was \$365,299.
3. For September 2018, water sales revenue was \$1,296,106. Other revenue sources contributed an additional \$133,626 for the month. Operating expenses for September totaled \$1,226,058. These revenue numbers were driven by a customer base of 31,921. The division recorded an operating income of \$203,674.
4. For September 2018, wastewater treatment revenue was \$1,031,383. Other revenue sources contributed an additional \$77,681 for the month. Operating expenses for September were \$973,077. This is compared to the budgeted amount of \$988,351. These revenue numbers were driven by a customer base of 19,079. The division recorded an operating income of \$135,987, which is compared to a budgeted operating income of \$167,434 for the month.
5. Next week, a conference call will be held with the two rating agencies for the bonds the Utility Board approved at the meeting held on August 24, 2018. The City Council voted to pass their resolution on the second reading last week.

### **Electric Division**

Bart Borden reported on the following:

1. The Line Department continued framing and installing distribution lines for the Spring Branch Industrial Park Innovation Drive Distribution Lines Project. The additional steel poles required for the project were supposed to be delivered yesterday per the manufacturer. Borden left a message to verify the delivery status, but has not heard an update due to the employee being out of the office. This will allow crews to complete the distribution pole installations and begin pulling in overhead conductors.
2. The East Cleveland 69 kV Bus Breaker Addition Project was delayed due to the abnormally warm weather experienced through September. East Cleveland Substation was not able to be switched out of service as normally scheduled due to the system loads being experienced. However, after temperatures became normal for the time of year, the station was taken out of service on October 17, 2018. CU's substation and maintenance crew has been busy assisting with the installation of the new power transformers and have transitioned to the breaker installation. Both projects will require their time for wiring and testing, before the substation can be returned to service.
3. The design phase for the Peerless Road LED Street Lighting Conversion Project has been completed and a work order for the lighting installation is being prepared.
4. Engineering worked with property owners along a section of Ocoee Street to make it possible to remove overhead primary conductors on Ocoee Street from Billy Graham Avenue south to

11<sup>th</sup> Street and west on 13<sup>th</sup> Street NW. This section of primary only serves customers along 13<sup>th</sup> Street NW. The work will involve installing a section of underground primary on 13<sup>th</sup> Street. The removal of 930 feet of overhead primary along these roadways will eliminate the necessity to trim trees along this section of Ocoee Street. The needed 10 feet of clearance from trees is required to provide safe, reliable service to all customers. Staff is always looking for ways to improve the system reliability and service to customers where it makes an economic and reliable outcome.

5. In reference to the Harriman Road Substation site work, Operations Engineer Kim Duncan attended the required stormwater prevention plan meeting with Murray Construction. This final step allowed grading work to begin on the project. The substation site grading work has been completed, and staff is very pleased with the site and project at this phase.
6. An update was reported for the power transformer replacements at East Cleveland Substation. The three new 40 MVA power transformers have been delivered to the pad locations at the site, and work has been completed in dressing the new units out with bushings, radiators and oil filling. Photographs were viewed. Electrical testing of the units is in progress.
7. A report was presented regarding traffic lighting:
  - Work orders have been released to replace the existing incandescent traffic signals with LED's on Broad Street at First and Second Street intersection locations.
  - CU's traffic signal coordinator and traffic light crews installed Miovision SmartSense equipment at five locations along Paul Huff Parkway at Mouse Creek, Peerless Road, Exit 27 northbound and southbound ramps, and Adkisson/Frontage Roads. Detector inputs were separated by channel to provide the maximum benefit from the software. Baseline data was collected during September and will be evaluated for timing and programming changes along the Paul Huff Parkway corridor. Miovision defines SmartSense equipment as the next generation of traffic technology. Using a type of artificial intelligence called deep learning, Miovision SmartSense brings artificial intelligence to the roadside to help cities sense and understand what's happening at the intersection in real time. SmartSense can detect the presence and movement of vehicles, pedestrians and cyclists and use this data to improve congestion and safety. This is a pilot project in which CU and city personnel are working together on.

### **Water Division**

Craig Mullinax reported on the following:

1. K. Berry Construction will soon begin the rehabilitation of spiral lift pump no. 203 at the Wastewater Treatment Plant. Several pictures were displayed and the process was explained. The pump will be sandblasted and completely recoated to protect the metal. A new coating product will be used that was recommended by a specialty company. The coating lasts an estimated 10 to 12 years.
2. Haren Construction has completed 60 percent of the Flocculation/Sedimentation Basin Improvements Project at the Cleveland Filter Plant (CFP). Updated slides of the project were shown. The coagulant room where alum and chlorine are fed (pretreatment) is complete and in operation. Two new 20-inch mag meters to measure the raw water were installed at the head of the flocculation basins. Phase 3 includes the rehab of four sets of basins, which will be done one at a time. It should take around one month to complete each basin.

3. Updated slides of the Georgetown Road Water Storage Tank, Booster Pump Station and Water Main Extension Project were reviewed. The tank was placed into service on October 10, 2018. Four pressure zones were combined into one zone. The average pressure increased by around 10 psi. The hydraulic grade line for CU's largest pressure zone is 1,042 feet, and the Georgetown Circle hydraulic grade line is 1,105 feet (27 psi higher). This has enabled CU to eliminate two other booster stations and will result in less maintenance and reduced energy costs. Additionally, CU will no longer need to purchase water from Savannah Valley Utility District; however, the connection will be kept for emergencies. The overall project is nearing completion. CU still has to install fencing around the tank.
4. The water main replacement project on Van Davis Road from SR60 to Swafford Cemetery Road is five percent complete. Hampton Backhoe will be boring under several driveways for the new waterline.
5. Mayse Construction has completed the Van Davis Road south of Morgan Road Water Main Extension Project. Flushing and sampling are in progress.
6. Hampton Backhoe has completed the waterline extension project on Varnell Road SW to near Blackfox Road that was requested by a customer. CU is participating in the funding, and the customer will pay 50 percent.
7. A formal request was submitted to the State Revolving Fund (SRF) for additional funding of \$379,500 for the 2010 Annexation Sewer Project on APD-40. This would bring the total to \$1,730,000.
8. The following plans are under review:
  - Ridgedale Forest Subdivision, Phase 2, consisting of 15 lots and 1,483 feet of 6-inch water main.
  - Ocoee OB/GYN Addition on Business Park Drive. The project scope is relocating 247 feet of 8-inch sanitary sewer.
9. Engineering approved plans for:
  - Cobblestone Ridge Subdivision on Old Chattanooga Pike comprising 48 lots, 1,800 feet of 6-inch water main and 2,180 feet of 8-inch sewer main.
  - RaceTrac Market on APD-40 at Holloway Road. The project scope is 360 feet of 8-inch water main and 500 feet of 8-inch sewer main.
10. Talley Construction has completed installation of water and sewer utilities at the Spring Branch Industrial Park Development. CU is televising the sewer mains as a quality control measure. This is a standard practice before CU will take over any sanitary sewer collection system.
11. An update was provided for the ongoing Wastewater Rehabilitation Project:
  - Westco has cleared approximately 30,000 feet or 5.7 miles of a total of 36,750 feet or 7 miles of sewer easement area.
  - Phase I of the Basin 10A-8 Rehabilitation Project is ongoing. Portland Utilities has completed 9,528 feet of mainline rehabilitation this period. A total of 17,324 feet of mainline rehab and 15 service lateral rehabilitations have been done to date.
12. The Meter Department set 33 meters through September 2018 compared to 24 for September 2017 and 37 for September 2016. Of the 33 meter sets, 18 were single-family homes, 3 were townhomes, 8 were apartments and 4 were commercial.

## **OLD BUSINESS**

### **FY 2018 Audit Report**

Arnett, Kirksey, Kimsey, Sullivan, Lay & Hall, PLLC, has completed the audit for fiscal year 2018. Representative Mark Lay was unable to attend the board meeting due to a scheduling conflict; however, he provided a written report which reviewed the 2018 audit report. The audit went well and total cooperation was received from the staff. Operating revenues and expenses for both Divisions were relatively unchanged for 2018. The comparative statements of Revenues, Expenses and Changes in Net Position reveal that the 2018 numbers are comparative to 2017. Both Divisions experienced an increase in net position for the year. The Electric Division increased \$3,761,592, and the Water and Wastewater Division \$4,580,196.

There was a new GASB statement effective for June 30, 2018. GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, which establishes standards for recognizing and measuring liabilities, deferred outflows of resources, deferred inflows of resources, and expense. The effect of this change resulted in a decrease in net position for both divisions. The Electric Division decreased \$2,426,413, and the Water Division \$3,350,761.

Board members were provided copies of the complete audit report in their board folders as well as Lay's contact information in the event there are any questions. Approval and acceptance will be requested for consideration at the next scheduled meeting.

## **NEW BUSINESS**

### **Resolution – Pinnacle Bank –Insured Cash Sweep Deposit Placement Agreement**

On motion by Joe Cate and seconded by Chari Buckner, the Utility Board took action to approve a resolution authorizing the President/CEO to execute an Insured Cash Sweep (ICS) Deposit Placement Agreement with Pinnacle Bank for the purpose of allowing Pinnacle Bank to place Cleveland Utilities' deposits with other depository institutions via the Insured Cash Sweep service of Promontory Interfinancial Network, LLC. The purpose of the agreement is to allow Cleveland Utilities to seek a higher return on idle cash balances while maintaining full FDIC insurance coverage on all the balances.

### **Approval of Purchase Order to CDW-G**

On motion by David May, Jr. and seconded by Vice Chairman Eddie Cartwright, the Board of Public Utilities voted to approve a purchase order to CDW-G in the amount of \$98,041.43 for an Isilon Storage System for the Disaster Recovery Project as a primary backup to the previously purchased Isilon System. The purchase is being made through a State of Tennessee Contract and is budgeted for FY 19.

### **Approval of Purchase Order to Substation Engineering & Design Corporation**

On motion by Chari Buckner and seconded by David May, Jr. the Utility Board unanimously approved a purchase order to Substation Engineering & Design Corporation in the amount of \$277,500 for the supporting steel structures, switches, insulators, mounting hardware and assembly drawings for the new Harriman Substation at the South Industrial Park. Three bids were received. Substation Engineering and Design Corporation submitted the low bid which met the required specifications. This is a budgeted item.

### **Approval of Purchase Order to ABB Inc. c/o Yoder Sales Agency**

On motion by Joe Cate and seconded by Vice Chairman Eddie Cartwright, the Board of Public Utilities took action to unanimously approve a purchase order to ABB Inc. c/o Yoder Sales Agency in the amount of \$100,010 for five 13kV ABB breakers for the new Harriman Substation. Four of the breakers are distribution circuit breakers while the fifth breaker will serve as a bus tie breaker. The

ABB breakers meet CU's specifications, and identical units have been installed across CU's electric system. Two bids were received, and the low bid was submitted by ABB/Yoder Sales Agency. The equipment is included in the FY 19 budget.

**Approval of Purchase Order to Siemens Industry c/o Utility Sales Agency**

On motion by Vice Chairman Eddie Cartwright and seconded by David May, Jr., the Utility Board voted unanimously to approve a budgeted purchase order to Siemens Industry c/o Utility Sales Agency in the amount of \$70,900 for two 69kV Siemens breakers for the new Harriman Substation. The Siemens breakers meet all CU specifications and are identical to existing 69kV breakers on the CU electric system. Two bids were received. The ABB breaker was initially low bid; however, the cost of necessary spare parts in the amount of \$2,500 resulted in the overall total for ABB being higher. Due to familiarity, proven service and being the low evaluated bid, the purchase of the Siemens breakers was requested.

**Approval of Purchase Order to Superior Concrete Products**

On motion by Chari Buckner and seconded by Joe Cate, the Board of Public Utilities took action to unanimously approve a purchase order to Superior Concrete Products in the amount of \$104,455 for the installation of a concrete screening wall at the new Harriman Substation. The cost includes engineering, permits, materials, installation, footings and freight for the project. Operations staff investigated the pricing for a wall to be constructed onsite in comparison to purchasing precast walls that are installed on a pier system. The precast option was determined to be the most economical product for this need. In addition, Operations staff visited a site in Brentwood where one of these walls has been in place for five years and recommended the low bidder, Superior Concrete Products, be awarded the bid. The purchase is budgeted for FY 19.

**Approval of Agreement with J.R. Wauford & Company**

On motion by David May, Jr. and seconded by Joe Cate, the Utility Board voted unanimously to approve an Agreement for Engineering Services with J. R. Wauford & Company, Consulting Engineers Inc. in the amount not-to-exceed \$60,000 for evaluating the existing solids handling/digestion facilities and perform future planning activities for the solids handling/digestion facilities at the Wastewater Treatment Plant. The project is budgeted for FY 2019 in the amount of \$40,000.

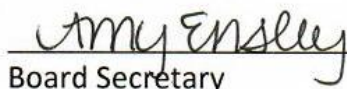
**OTHER BUSINESS**

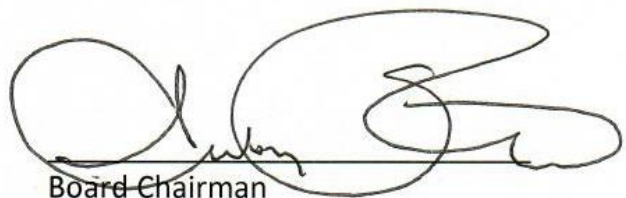
**Future Board Meeting Dates**

Future scheduled board meeting dates at the Tom Wheeler Training Center are as follows:

Friday, November 30, 2018, 12:30 p.m.

Friday, January 4, 2019, 12:30 p.m.

  
Board Secretary

  
Board Chairman

11-30-18  
Date



**MINUTES OF REGULAR MEETING**  
**CLEVELAND UTILITIES BOARD**  
**NOVEMBER 30, 2018**

*The Board of Public Utilities met at 12:30 p.m. at the Tom Wheeler Training Center.*

Present were the following: Aubrey Ector, Chairman; Eddie Cartwright, Vice Chairman; Chari Buckner, Cleveland Utilities Board; Councilman David May, Jr., Cleveland Utilities Board; Tim Henderson, President/CEO; Amy Ensley, Utility Board Secretary; Jimmy Isom, Manager Electric Engineering; Craig Mullinax, VP Water & Wastewater; Jan Runyon, Assistant VP Administrative Services; Marshall Stinnett, VP/CFO; Walt Vineyard, Executive VP; Kim Duncan, Operations Engineer; Mike Isham, Line Section Supervisor; Brandon Ingram, Lineman; Max McCann, Lineman; Tim Raines, Lineman; Bill Raulston, Lineman; Denley Hines, Bowater Credit Union President/CEO; Kim Gunter, Bowater Credit Union VP Marketing; and Tim Siniard, *Cleveland Daily Banner*. Following the Pledge of Allegiance to the American Flag, Tim Raines delivered the invocation.

**MINUTES OF OCTOBER 26, 2018**

On motion by Vice Chairman Eddie Cartwright and seconded by Chari Buckner, the Board of Public Utilities voted to approve the October 26, 2018, minutes as written.

**MANAGER'S UPDATE AND ANNOUNCEMENTS**

**Christmas Parade**

Cleveland Utilities will again show its Christmas spirit with the "Gingerbread House" themed float in this year's annual Christmas Parade taking place on Sunday, December 2, at 6:00 p.m. Board members were invited to join. Henderson thanked all employees who have worked diligently preparing the float for the fun-filled event.

**Christmas Luncheon**

The annual Christmas Luncheon will be held Thursday, December 13, 2018, from 11:30 a.m. to 1:30 p.m. at the Tom Wheeler Training Center.

**Offices Closed-Christmas and New Years Holidays**

Cleveland Utilities will be closed Monday thru Wednesday, December 24-26, to observe the Christmas holiday and December 31 and January 1, in recognition of New Years. The Call Center will be open and regular emergency/standby services will be maintained 24/7. This coincides with the city's holiday schedule.

**Kiosk Partnership – Bowater Credit Union**

Cleveland Utilities has entered into a kiosk partnership with Bowater Credit Union (BCU). As of today, a CU kiosk is operational at the BCU located on Hardwick Farms Parkway. Henderson and Stinnett expressed appreciation to Bowater Credit Union President/CEO Denley Hines and Marketing VP Kim Gunter. Hines reciprocated and stated BCU is happy to partner with CU on this service.

**Hurricane Michael Mutual Aid Assistance Recognition**

A total of eight CU linemen recently assisted with power restoration efforts in Florida resulting from the destruction left behind by Hurricane Michael. President/CEO Henderson honored Brandon Ingram, Max McCann, Tim Raines and Bill Raulston who were able to be in attendance for the Board Meeting. Employees Al Butler, Josh Day, Steve Mowery and Eric Smith were unable to attend.

The total deployment consisted of 28 days between both crews. They worked 16-hour days clearing paths and right of way to access the power lines for repair, replacing poles, installing new wire and

completing other work necessary to restore power. Ingram, McCann, Raines and Raulston reflected on their experience and advised the customers without power were extremely grateful and appreciative of them being there to help. The hosting utilities were very accommodating and took great care of them as well. All stated they were thankful for the opportunity to serve others following a disaster such as this. Chairman Ector said, "Thank you for representing us so well."

## **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 2014 through December 2018 was reviewed. For the month of December, the residential retail electric rate will change to 9.672 cents per kilowatt-hour, an increase of 2.81 percent over November's rate of 9.408 cents per kilowatt-hour. This rate change is driven by TVA's Fuel Cost Adjustment. As a continued trend, Cleveland Utilities will pass the TVA fuel cost rate adjustment to its consumers.
2. The October 2018 financial and statistical statements were presented to the Utility Board. During October, the cost of purchased power as a percentage of retail sales was 80.8 percent and can be compared to the budgeted percentage of 78.7 percent for FY 2019. The results for October 2018 are electric sales revenue of \$7,272,827 which was offset by a purchased power expense of \$5,879,452. This resulted in an operating margin of \$1,393,375. Operating expenses for the month were \$1,908,319. These revenue numbers were driven by a customer base of 31,726. The net loss for the month was \$338,861.
3. For October 2018, water sales revenue was \$1,238,844. Other revenue sources contributed an additional \$144,133 for the month. Operating expenses for October totaled \$1,272,177. These revenue numbers were driven by a customer base of 32,023. The division recorded an operating income of \$110,800.
4. For October 2018, wastewater treatment revenue was \$1,024,813. Other revenue sources contributed an additional \$84,903 for the month. Operating expenses for October were \$979,012. These revenue numbers were driven by a customer base of 19,141. The division recorded an operating income of \$135,987, which is compared to a budgeted operating income of \$130,704 for the month.

### **Electric Division**

Jimmy Isom reported on the following in the absence of Bart Borden:

1. The remaining additional steel poles for the Spring Branch Industrial Park Innovation Drive Distribution Lines Project arrived from the manufacturer. CU's line construction crews are in the process of setting the remaining poles and installation of the primary conductor will follow. The completion is projected for early January.
2. In reference to the East Cleveland 69 kV Bus Breaker Addition Project, the breaker installation and wiring has been completed by CU's substation maintenance crews. Programming and testing of the relays and SCADA will be done this week by operations and engineering staff, and final testing by Liberty Power Service is scheduled for next week.
3. Engineering has issued a work order for the Peerless Road LED Street Lighting Conversion Project. The material is in stock, and upgrade of the lights will be scheduled in the near future.
4. Murray Construction has completed the grading work for the Harriman Road Substation site. The sewing of grass and headwalls for the drainage tile under the driveway has also been

done. Additionally, Murray Construction has installed an access drive at the site to one of CU's poles for wire pulling purposes and future maintenance requirements. The site is now ready for fencing to be installed. Isom advised there is good soil/red clay at the site which will be ideal for grounding.

5. Virginia Transformer crews have completed the dressing out and testing of the three new 161/69 KV power transformers at East Cleveland Substation, and CU's substation maintenance crews have completed all the connections and wiring. Liberty Power Service will begin testing of the units next week. TVA has tentative plans to energize the units on Saturday, December 15, 2018. Cleveland Utilities will then energize the units the following Monday, December 18, with load gradually being added several days later if everything checks out.
6. Engineering released a work order to install a transformer at Spring Creek Development for a new hibachi restaurant being built on the west side of Jenkins' parking lot. CU will be installing 1,380 feet of underground #1/0 aluminum primary and a 75 kVA 3 phase pad-mount transformer to serve the expected 45kW demand. The contractor is required to install the conduit and concrete pad for the transformer. At this time, only a temporary service will be connected to the transformer.
7. Engineering met with the developer concerning the electric service installation to Cobble Stone Ridge Subdivision. This is a new development located on Old Chattanooga Pike SE consisting of 48 lots (46 are buildable single family residential lots and the other two will be detention ponds). This will include the installation of (3) 50 kVA, (2) 75 kVA, (1) 100 kVA transformers and upsizing from a 15 kVA to a 25 kVA transformer. Additionally, 1,660 feet of 2-inch primary conduit, 1,850 feet of #1/0 underground primary conductor, 1,895 feet of 3-inch secondary conduit, 1,300 feet of #4/0 and 715 feet of #350 underground aluminum triplex will be installed.
8. Engineering released a work order to provide service to the new Dollar General located on Dalton Pike SE just north of the old Waterville School location. The work will consist of installing 420 feet of #1/0 underground primary and a 50 kVA transformer. The service size will consist of a 600 amp main 120/240 single phase service.
9. Engineering has met with the developer on providing electric service to Fulbright Crossing. This is a new townhome/apartment development located at the corner of Fulbright Road and Shady Lane comprising 15 townhomes in 5 structural buildings and 6 apartments in 2 structural buildings. Engineering has released a design to the developer consisting of a 100 kVA and (2) 50 kVA transformers. Approximately 540 feet of 2-inch primary conduit with 680 feet of #1/0 underground primary and 180 feet of 3-inch secondary conduit with 210 feet of #350 aluminum underground triplex will be installed.
10. A report was presented regarding traffic lighting:
  - A work order was released to rewire the signal conductor at Paul Huff Parkway and Frontage Road. This intersection was responsible for numerous trouble calls over the last several weeks resulting from deteriorating conductor insulation. The 5-section doghouse signals will be removed and replaced with 3-section flashing yellow arrow signals, and the northbound left turn lane will also receive a flashing yellow arrow signal.

## **Water Division**

Craig Mullinax reported on the following:

1. W&O Construction has completed the Headworks Rehabilitation Project at the Wastewater Treatment Plant (WWTP). The contract amount was \$1,023,550. CU is awaiting the final invoice.
2. Cherokee Construction has completed approximately 50 percent of the screening compactor area site improvements at the WWTP.
3. On November 27 and 28, 2018, the Tennessee Department of Environment and Conservation (TDEC) conducted the annual sanitary survey of the water system. Staff felt the survey went well and are awaiting the results.
4. Haren Construction has completed 60 percent of the Flocculation/Sedimentation Basin Improvements Project at the Cleveland Filter Plant (CFP). Yesterday, the plant was shut down for six to seven hours to perform some necessary work. During this time, the flow rate was lowered to 4,000 gpm which is equal to 5.7 million gpd. CU is currently buying the basic minimum due to being in a lower demand period; however, any additional water needed will be provided by the Hiwassee Utilities Commission (HUC). Haren is doing a fantastic job with the various dynamics and amount of activity the project entails.
5. An update was provided for the Georgetown Road Water Storage Tank, Booster Pump Station and Water Main Extension Project. Crom completed the fence installation around the tank this week. The paving on Georgetown Circle was bid separately and will add an additional \$37,211 to the project. This will be presented under old business for board consideration.
6. Angel Construction has completed the Baugh Springs Trail and Banther Road Water Main Extension Project. When the project was bid, it included 3,392 feet of 6-inch water main; however, the scope changed and 2,849 feet was installed. This resulted from the county's decision to not fund one leg of the line. The final project amount was \$63,831.
7. Hampton Backhoe has completed 50 percent of the water main replacement project on Van Davis Road from SR60 to Swafford Cemetery Road.
8. Mayse Construction has completed the Van Davis Road south of Morgan Road Water Main Extension Project. CU is awaiting the final invoice.
9. Hampton Backhoe has completed the waterline extension project on Varnell Road SW to near Blackfox Road. The final contract amount was \$18,695.
10. On November 19, 2018, Mayse Construction started work for 2010 Annexation Sewer Project on APD-40.
11. Engineering is reviewing the following plans:
  - Paul Huff Corners on Peerless Road and Paul Huff Parkway consisting of 2 commercial lots, 1,020 feet of 8-inch water main and 590 feet of 8-inch sewer main.
  - Graystan Square on Mouse Creek Road and Paul Huff Parkway. The project scope includes 4 commercial lots, 850 feet of 8-inch water main and 840 feet of 8-inch sewer main. Leconte Cleveland, LLC is the developer.
  - Bradley Place (11 retail buildings) at Bradley Square Mall. The work involves the relocation of a 10-inch water main and sewer is still to be determined. Plans call for the proposed buildings to be installed over a portion of the existing water and sewer lines. The contractor requested for the water line under the structure to be taken out of service so they could proceed with preliminary work. During this process, the valves failed and a contractor from Knoxville was engaged to assist CU with the work. As of

yesterday, the water line is now out of service. There are some challenging aspects in this project.

12. Engineering approved plans for:

- Ocoee OB/GYN Addition on Business Park Drive in Spring Creek. The project scope is relocating 247 feet of 8-inch sanitary sewer.
- Fulbright Crossing on Fulbright Road consisting of 2 triplexes, 15 townhomes and 376 feet of 8-inch sewer main.

13. The following developments are under construction:

- Cobblestone Ridge Subdivision on Old Chattanooga Pike. The development includes 48 lots, 1,800 feet of 6-inch water main and 2,180 feet of 8-inch sewer main. D&S Custom Homes, LLC is the developer, and Marvin Sledge Construction is the contractor.
- Greywood Farms Subdivision on Old Charleston Road which includes 47 lots and 2,271 feet of 6-inch water main.
- Bellingham, Phase 2, on Urbane Road consisting of 156 townhome units, 3,800 feet of 8-inch sewer main and 4,000 feet of 6-inch water main.

14. An update was provided for the ongoing Wastewater Rehabilitation Project:

- Westco has completed clearing along sewer main easements. They cleared approximately 35,000 linear feet or 6.6 miles of easement area.
- Phase I of the Basin 10A-8 Rehabilitation Project is ongoing. Portland Utilities has completed 5,027 feet of mainline rehabilitation and 36 service lateral rehabilitations this period. To date, the contractor has completed 73 percent of the mainline rehab and 14 percent of the service lateral rehabilitation.

15. The Meter Department set 36 meters through October 2018 compared to 22 for October 2017 and 20 for October 2016. Of the 36 meter sets, 27 were single-family homes, 4 were townhomes, 1 was an apartment, 2 were irrigation and 2 were commercial.

16. The total amount of rainfall recorded at the CFP from January 1, 2018, through November 27, 2018, was 60.74 inches (10.24 inches above average). It has been an extremely wet year. The annual projection is 66.26 inches.

## **OLD BUSINESS**

### **Approval and Acceptance of FY 2018 Audit Report**

On motion by Vice Chairman Eddie Cartwright and seconded by David May, Jr. the Board of Public Utilities voted to approve and accept the Fiscal Year 2018 audit report.

### **Approval of Change Order with Roy Joe Angel d/b/a Angel Construction Company-Georgetown Road Water Systems Improvement Project**

On motion by David May, Jr. and seconded by Vice Chairman Eddie Cartwright, the Utility Board took action to approve Change Order 1 (Final) with Roy Joe Angel d/b/a Angel Construction Company as part of finalizing material quantities for the waterline extension on the Georgetown Road Water System Improvements Project. The final project cost increase is \$78,096.38. The original contract amount was \$315,160, and the adjusted final contract amount will be \$393,256.38. The overall final project cost which includes the waterline extension, water storage tank and water booster station should be less than the total SRF Loan of \$1,625,000 with \$200,000 in loan forgiveness.

## **NEW BUSINESS**

### **Approval of Suspension of Seasonal Time-of-Use Manufacturing Service Rate – Schedule TDMSA and Time-of-Use General Service Rate – Schedule TDGSA**

On motion by Chari Buckner and seconded by Vice Chairman Eddie Cartwright, the Board of Public Utilities voted to approve the suspension of the Seasonal Time-Of-Use Manufacturing Service Rate-- Schedule TDMSA and Time-Of-Use General Service Rate – Schedule TDGSA rates. It has been determined the existing Time-Of-Use rates do not support the necessary revenue to support the cost of service to this class of customers. It is the recommendation of CU staff and Rates Analyst, Chris Mitchell, to officially suspend these rates and to craft a MSA rate that would support the necessary revenue which would support the cost to serve. Staff recommends the suspension to allow the three Manufacturing Services on the rate and the one General Service Company in the process of changing to this rate, remain on the rate for a period of two years based on each customer's contract date of termination. This requires board action as set forth in the TVA Power Contract.

### **Approval of Purchase Order to Ortwein Sign**

On motion by Vice Chairman Eddie Cartwright and seconded by Chari Buckner, the Utility Board took action to approve a purchase order to Ortwein Sign in the amount of \$66,500 for the manufacturing and installation of a digital sign and signage at CU's main campus. This scope of work was bid independently of the overall building renovation contract. Two bids were received, and Ortwein submitted the low bid. The purchase order was signed on November 8, 2018, to protect against construction delays in the project. This is a budgeted item.

### **Approval of Purchase Order to Sherman & Reilly**

On motion by Chari Buckner and seconded by Vice Chairman Eddie Cartwright, the Board of Public Utilities voted to approve a purchase order to Sherman & Reilly in the amount of \$62,480 for multi conductor travelers, one running board and two running grounds. This equipment will be used by the Line Department to install double conductor overhead transmission lines. Two bids were received, and Sherman & Reilly submitted the low bid meeting CU's minimum specifications. The equipment is budgeted for FY 19.

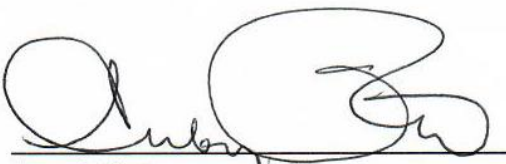
## **OTHER BUSINESS**

### **Future Board Meeting Dates**

Future scheduled board meeting dates at the Tom Wheeler Training Center are as follows:

- Friday, January 4, 2019, 12:30 p.m.
- Friday, January 25, 2019, 12:30 p.m.
- Friday, February 22, 2019, 12:30 p.m.
- Friday, March 22, 2019, 12:30 p.m.

  
Board Secretary

  
Board Chairman

1-4-19  
Date