

MINUTES – AUGUST 4, 2016 **CLEVELAND UTILITIES BOARD**

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

Present were the following: Aubrey Ector, Chairman; Eddie Cartwright, Vice Chairman; Tom Rowland, Mayor; Joe Cate, Cleveland Utilities Board; Chari Buckner, Cleveland Utilities Board; Tim Henderson, Senior VP; Amy Ensley, Utility Board Secretary; Marshall Stinnett, VP/CFO; Bart Borden, Electric Division VP; Craig Mullinax, Water and Wastewater VP; Walt Vineyard, Information Technology VP; Jan Runyon, Assistant VP Administrative Services; John Corum, Safety Director; Aaron Kinser, Meter Lab Supervisor; Jamie Creekmore, Customer Relations Supervisor; Rev. David O’Neal; and Rick Norton, *Cleveland Daily Banner*. Following the Pledge of Allegiance to the American Flag, Rev. David O’Neal, Associate Pastor at Cleveland First Church of the Nazarene, delivered the invocation.

MINUTES OF JUNE 23, 2016

On motion by Mayor Tom Rowland and seconded by Chari Buckner, the Board of Public Utilities voted unanimously to approve the June 23, 2016, minutes as written.

MANAGER’S UPDATE AND ANNOUNCEMENTS

Senior VP Tim Henderson reported the manager’s update and announcements in the absence of President/CEO Ken Webb.

Update on Webb

President/CEO Ken Webb was absent due to having back surgery on Tuesday. He is home recovering and doing well. Senior VP Tim Henderson asked for continued prayers for Webb throughout the recovery process.

United Way Volunteer Day

CU took part in Bradley County’s United Way Day of Action on Friday, July 22, 2016. This is the fourth year CU has participated in this event. A brief video from the day was shown. Two teams comprised of 19 employees completed various assignments at Black Fox Elementary School and the Boys & Girls Club - Blythe Avenue unit. The first group of volunteers worked on mulching, painting, cleaning and minor repair work at Black Fox Elementary School. Those employees were Matt Barnes, Lafeomia Bowerman, Travis Defriese, Todd Gober, Karen Hall, Tim Henderson (crew leader), Jimmy Isom, Craig Mullinax and Maribel Ware. The second group worked on pressure washing, painting, cleaning and installation of shelving at the Boys & Girls Club - Blythe Avenue Unit. Those employees were Jeremy Chastain, John Corum (crew leader), Amy Ensley, Ken Flowers, Lisa Harris, Deanna Hitch, Dalton Montgomery, Jared Pomeroy, Shantae Thompson and David Yost.

Volleyball Tournament

CU will have a team of eight employees participating in the River Counties Association of Realtors “Volley for a Cure” Volleyball Tournament on Thursday, August 11, 2016, at Cleveland State Community College. This will be the third year CU employees have played in this tournament. All proceeds will benefit the American Cancer Society.

Tennessee Valley Public Power Association (TVPPA) North American Electric Reliability Corporation (NERC) Compliance Team Recognition Letter

A letter was recently received from TVPPA conveying appreciation to Cleveland Utilities for supporting the work of TVPPA’s NERC Compliance Team and Bart Borden’s participation on the team. Henderson advised CU is grateful for Borden’s commitment to this effort and his

expertise being shared across the valley through this process. Borden provided the following details about the organization and his involvement with the team:

- Since 2007, Cleveland Utilities has been covered by the Tennessee Valley Authority (TVA) for all NERC related requirements.
- A NERC Response Team was formulated, and Borden was asked to represent the Southeastern District 17 Local Power Companies (LPC's) on the team with a July 1, 2016, deadline to have all LPC's in compliance. Communication started in November; however, the team was not truly organized until January.
- The purpose was to formulate specific defined roles for TVA and the LPC's due to the more stringent requirements by NERC.
- The first task was to create a Memorandum of Understanding (MOU) with TVA and the LPC's concerning each party's responsibilities. The MOU served as a roadmap for complying with current and future NERC reliability standards.
- Each of the LPC's fall under differing NERC requirements, so Appendices defining each main section of requirements had to be developed, and TVA had to determine which Appendices applied for the 152 LPC's.
- A comprehensive joint communications plan was developed to assure all LPC's are well informed about NERC standards, timelines and the MOU enabling agreement. Borden noted the LPC's were not required to sign the documents; however, if they did not, they would have to register with NERC for all applicable standards.
- At the beginning of 2016, CU conveyed a portion of the 161 kV bus and the supporting insulators to TVA, to avoid being a Bulk Electric System (BES) Owner. This step greatly simplified CU's reporting requirements at the South Cleveland Substation.
- CU has a differential relay circuit and a 125 VDC battery system that falls under the BES testing and reporting requirements at the East Cleveland 161/69 KV substation. This relay system protects CU's power transformer bank and the bus system around it, up to TVA's bus breaker.
- TVA is presently charging LPC's an annual fee of \$200.00 per substation that requires their oversight. CU's two substations result in a \$400.00 annual fee paid on July 1st of each year.
- CU's facilities require participation in Appendix A - the Communication Requirement for Personnel; Appendix B - Protection System Maintenance for BES Components; Appendix C - Protection System Maintenance for Non-BES Components; Appendix D - Analysis and Mitigation of Transmission and Generation Protective System Misoperations and Appendix E - Automatic Underfrequency Load Shedding.
- TVA reported all 152 LPC's signed MOU's and Appendices by July 1, 2016.
- This team met 18 times in the Nashville area, held many phone conferences and reviewed hundreds of pages of very interesting information. It was truly a team effort with TVPPA, the LPC's and TVA.
- The team is working on finalizing a NERC Compliance/Protective System Maintenance Program for the LPC's to use in the field and to assure proper documentation.
- This will be an ongoing process as new standards are released.

Henderson added, "Our team is very active in a lot of different capacities in the valley with TVPPA, the Southeastern District and various other organizations. It really is a great value to have the networking that occurs in our industry, both water and electric."

CPR Training Opportunities

Safety Director John Corum invited Board Members to attend one of the upcoming CPR /First Aid classes offered by Cleveland Utilities through the American Heart Association. There will be morning and afternoon sessions on Tuesday, August 9; Thursday, August 18; Monday, August 22; and Friday, August 26. The sessions will last approximately three hours, and the training will be held in the Tom Wheeler Training Center.

DIVISION REPORTS

Financial

Marshall Stinnett reported on the following:

1. An update was provided for the new Pre-Pay program that launched approximately three weeks ago. As of today, 84 customers have enrolled in the program, and this number is expected to reach 100 by Friday, August 5, 2016 (approximately 10 customers a day are signing up). To date, over \$1,200.00 in bad debt has been collected through this program. The bad debt is from final bills that were never paid, and the customers have signed up for service again. Prior to Pre-Pay, customers were required to pay entire balances upfront before service could be reestablished. Now, customers are able to pay off past-due balances as they continue their service through the Pre-Pay option. Currently, only 2 customers have been disconnected, both of which were reconnected within 24 hours. This program has been well received by customers, and Stinnett thanked the Utility Board for their support of this initiative.
2. A chart tracking the kilowatt-hour cost in residential retail electric rates for the months of August 2012 through August 2016 was reviewed. For the month of August, the residential electric rate will change to 9.724 cents per kilowatt-hour, a decrease of 0.16 percent over July's rate of 9.740 cents. This rate change is driven by TVA's Fuel Cost Adjustment.
3. The June 2016 financial and statistical statements were presented to the Utility Board. During the month, the cost of purchased power as a percentage of retail sales was 78.1 percent, as compared to 81.2 percent for the month of May. The year-to-date percentage is 81.4, compared to a budgeted percentage of 82.8 for FY 2016. Stinnett pointed out all of the financial information is unaudited. This is the first time June's statements have been released this quickly, so there will be small adjustments made through this process with the external auditing firm. The results for June are electric sales revenue of \$9,547,160, which was offset by purchased power of \$7,454,606. This resulted in an operating margin of \$2,092,554 and can be compared to a budgeted margin of \$1,470,981 for the month. Operating expenses for the month were \$1,747,541, compared to a budgeted amount of \$1,528,098. The division serviced 31,118 customers. Net income for the month was \$485,462. This brings the year-to-date net income to \$1,581,390. As a comparison, the previous year-to-date net income was \$345,199 (net of the pension adjustment, which was a large decrease to expense). Information has been received for the Tennessee Consolidated Retirement System (TCRS) and the Central Service Agency (CSA) Mass Mutual plan to make the pension adjustment for 2016. Operating expenses in the electric division were over budget by approximately \$300,000 and can be

attributed to the pension adjustment, which was just below \$300,000 for the electric division. This is being driven by the timing of when the plan is valued at the market. The TCRS plan is valued as of June 30, 2015, and the CSA Mass Mutual plan is valued as of October 1, 2015. Market performance at the evaluation date and the number of employees added to the pension plan are determining factors of the pension expense amount.

4. For June 2016, water sales revenue was \$1,446,501, compared to the budgeted amount of \$1,243,373. Other revenue sources contributed an additional \$150,819 for the month. The division serviced 31,222 customers. Operating expenses for June were \$1,424,607. This can be compared to the budgeted amount of \$1,205,753. The division recorded an operating income of \$172,713 and can be compared to a budgeted operating income of \$156,676. The year to date net income is \$1,166,750. Stinnett pointed out the difference in operating expenses is justified by the pension expense adjustment, which came out to \$242,000 for the water division.
5. For June 2016, wastewater treatment revenue was \$1,063,450, compared to the budgeted amount of \$988,988. Other revenue sources contributed an additional \$145,967 for the month. The division serviced 18,618 customers. Operating expenses for June were \$966,847 and can be compared to a budgeted amount of \$893,080. The division recorded an operating income of \$242,570, compared to the budgeted operating income of \$180,830 for the month. The year to date net income is \$2,019,190, and the difference in the pension adjustment was an increase to expense of \$180,000. Stinnett reminded the biggest key with the changes in the accounting standards is looking at the cash flow statements.

Electric Division

Bart Borden reported on the following:

1. All of the work for the design to relocate the 69/13.2 kV lines for the new Honorable Mayor Tom Rowland Interchange at Stone Lake Road has been completed. The total project cost was \$164,161.43.
2. Work progressed on the Peach Orchard Hill Road Community Development Block Grant project. CU crews completed the installation of conductors, the removal of the existing conductors and transferred all equipment to the new steel poles from Benton Pike to the top of Peach Orchard Hill Road. Crews continued to frame and lay out conductors from the top of the hill toward the west to Michigan Avenue, in preparation of pulling in the new conductors.
3. The installation for the Blue Springs Road and APD-40 69 kV line design project remained on hold.
4. Crews have completed the projects for the South Cleveland S-614 and S-624 transmission lines. The total cost for the installation of the two (2) 90-foot steel poles was \$53,885.54 and \$180,750.80 for the parallel 556 mcm conductor.
5. CU's Standby Electric Supervisors participated in TVA's annual Emergency Load Curtailment Plan test. The test takes all the LPC's through each of the steps 10 through 60. The test helps to ensure all of CU's contact information is up-to-date and personnel are prepared to carry out all steps in the plan. The steps are as follows:
 - Step 10: In-House Load Reductions by TVA and LPC's
 - Step 20: Public Appeal for Voluntary Load Reductions by All Customers
 - Step 30: Last Action to Avoid Firm Load Curtailment

- Step 40: Partial Curtailment of Large Firm Load
- Step 50: Interruption of General Firm Load by CU (Borden noted this has never occurred in his 35 years' of experience)
- Step 60: TVA Emergency Tripping of Firm Load

This is an annual test and is part of the NERC requirements.

6. CU crews installed two underground fed pad-mount transformers and cable for phase two of Victory Cove Subdivision. The anticipated additional load for this phase is 100 kW when populated.
7. Crews installed 4,200 feet of 1/0 underground primary cable, (9) nine pad-mount transformers and one primary switch sector, connected three (3) temporary poles and set meters for temporary service to the new apartment complex on Buchanan Road. The anticipated additional load to the system is 575 kW.
8. Cleveland Utilities installed and metered a 225 KVA pad-mount transformer, 855 feet of 1/0 underground primary cable and made all connections for customer-owned permanent service conductors at Surf's Up II Carwash on Dalton Pike, just off of Treasury Drive. The anticipated load is 175 kW.
9. An update was presented on traffic lighting:
 - CU line and traffic lighting crews completed the installation of new LED school zone signs at Bradley County's Valley View Elementary School. This project required coordination between Bradley County, Cleveland Utilities, TDOT, Volunteer Energy Cooperative (VEC), Bradley County Schools and property owners. A TDOT safety grant will provide all of the funding for this project. The school administration and Bradley County personnel were very pleased with the efforts and outcome. Borden added, "This is a great example of how Cleveland Utilities serves our community with more than just electric, water and wastewater services."
 - The communications equipment in the downtown corridor experienced widespread damage. A surge destroyed the data communications port on 12 of 13 Microhard radios and 11 of 13 controller ports. All but three of the traffic controllers have an additional auxiliary port that can be used for communications. CU's engineering personnel is currently investigating the possibility of programming the radios diagnostic port to pass data to the controller's auxiliary port. This will extend the life of the existing radio network at a minimal cost, if able to do so. There is suspicion a high powered mobile radio system that was being over amplified could have caused the damage, as the vehicle drove through the downtown area. This type of damage has been documented by other cities.

Water Division

Craig Mullinax reported on the following:

1. The water and wastewater plants, along with HUC, are participating in an emergency load curtailment program sponsored by VEC. Key staff are notified by VEC when the program needs to be implemented. Personnel have identified several items at the plants that can be taken off-line during this one-hour period, while still meeting all of the needs in supplying water and treating wastewater. The program is working well.

2. The plants will also be participating in an energy savings program through TDEC. Staff is attending the first meeting today. Several key players are involved such as TDEC, EPA Region 4, an Engineering Consultant out of Memphis, TVA, etc.
3. K. Berry Construction has completed the project for the coating of the influent measurement structures at the Wastewater Treatment Plant. The total project cost was \$31,144.00.
4. Structures Unlimited, a subcontractor to Brown's Custom Fence and Construction, completed removal of the old canvas cover at the biosolids pad at the Wastewater Treatment Plant. The new white cover will be installed in the near future. Several pictures were shown.
5. An update was provided for the following ongoing projects at the Cleveland Filter Plant (CFP):
 - Plans for the pipe gallery access improvement project were submitted and reviewed by CU's engineering department. Comments have been sent back to CTI Engineers for revisions. A pre-bid meeting will be held on August 16, 2016. The bid date has been set for August 23, 2016.
 - CU's engineering department reviewed plans for the liquid fluoride conversion projects at the Cleveland Filter Plant (CFP) and Waterville Plant. Comments have been sent back to CTI Engineers for revisions. A bid date has not been set for either of these projects.
6. The third and final phase of the fire hydrant painting project is progressing. King Industries has painted a total of 565 fire hydrants as of July 21, 2016.
7. The project to paint the water storage tank on Bryant Drive is currently on hold due to the dry weather. Work is expected to begin around September 1, 2016, in order to complete the project ahead of the winter months.
8. Barge Waggoner Sumner & Cannon, Inc. has GPS surveyed 2,226 water valves out of 3,695. The project is anticipated to be complete by the end of August.
9. In reference to phase 3 of the 24-inch water main project from Tasso Lane NE, to the Hiwassee Utility Commission (HUC) Water Treatment Plant, the plans and specifications have been submitted to the TDEC State Revolving Fund (SRF) department for review and approval.
10. Hampton Backhoe Service continues to work on the water main replacement project for Morgan Johnston Circle, 13th Street SE and 24th Street NW. All work is complete on Morgan Johnston Circle. The contractor is currently working on 24th Street. The project is anticipated to be finished in the near future.
11. J.R. Wauford & Company started the design for the modifications to the overflow pump station. The plans are expected to be received by September.
12. Engineering has approved the following plans:
 - Brook Hollow Subdivision on Peach Orchard Hill Road. This 18-lot development will consist of 480 feet of 6-inch water main and 487 feet of 8-inch sewer main. Eddie Botts is the developer.
 - Phase 4 of Silver Springs on Old Freewill Road. This 12-lot development will consist of 445 feet of 8-inch sewer main. Dennis Epperson is the developer.
13. Engineering is reviewing plans for Weeks Drive Townhomes. This 7-lot development will consist of 150 feet of 8-inch sewer main. D&S Custom Homes is the developer.
14. An update was provided for the Wastewater Rehabilitation Project:
 - To date, Littlejohn Engineering Associates has completed approximately 150,000 linear feet of smoke testing in Basin 10A-8.

- Littlejohn Engineering Associates is finalizing recommendations for Basin 31-45 and Basin 10-36 Rehabilitation, Phase 3. A meeting was held on July 21, 2016, to select rehabilitation areas. Plans are expected to be complete the week of August 8th and will then be submitted to the SRF.
15. The meter department set 50 meters through June 2016, compared to 37 for June 2015 and 40 for June 2014. The FY total meter sets is 383. Of the 50 meter sets, 28 were single-family homes, 16 were townhomes, 1 was an apartment, 3 were irrigation meters and 2 were commercial.
 16. In July, a total of 383 million gallons of water was pumped (a 12 percent increase from the same period last year). The total amount of rainfall recorded at the Cleveland Filter Plant through July 31, 2016, was 27.38 inches. There has been a substantial increase in water usage due to the lack of rain.

NEW BUSINESS

Safety Internal Performance Measures (IPM's)

Safety Director John Corum presented the Safety Internal Performance Measures (IPM's) for January 2016 through June 2016 as part of CU's Strategic Plan.

The overall results for the period are as follows:

- OSHA Recordable Incident Rate (a calculation that describes the number of employees per 100 full-time employees that have been involved in a recordable injury or illness) – a combined total of 0.51 for both divisions, compared to 2.48 in 2015.
- DART Rate (a calculation that describes 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 0 for both divisions, compared to 1.49 in 2015.
- 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 for both divisions, compared to 0 in 2015.
- Vehicle Accident Rate (a calculation resulting when an insurance claim is filed for an accident) – a combined total of 4.51 for both divisions, compared to 5.67 in 2015.

The following data went into the calculations:

- A total of 559,583 consecutive hours have been worked by both divisions combined without a lost-time injury (LTI). Electric division employees contributed 137,698 of those hours, with the last lost-time injury occurring on November 19, 2015. The water division has reached 421,885 hours, with the last lost-time injury occurring on November 15, 2013.
- A total of 195,820 cumulative hours were worked company-wide. 106 employees in the electric division worked 114,201 hours, and 76 employees in the water division worked 81,619 hours.
- In addition, a total of 443,153 cumulative vehicle miles were driven by employees in 116 vehicles. 187,828 miles were driven by electric division employees, and 255,325 miles by water division employees.

Some strides have been made this year in safety in comparison to the figures from 2015. As a proactive measure and an effort to reduce the vehicle accident rate, some new

processes have been implemented. One that has been in practice for approximately one year is the inclusion of a Driver Daily Vehicle Inspection Report in all commercial vehicles. This is a daily checklist for drivers to go through before leaving the facilities to confirm the vehicles are safe to operate. This has been embraced and Corum credited the frontline supervisors for reinforcement. Another measure includes collecting vehicle accident information, conducting an investigation and reporting the findings in the next safety meeting.

Corum thanked the Utility Board for their support of CU's safety programs and advised that safety is paramount. Henderson echoed the importance of the culture of safety at Cleveland Utilities. He said, "It is our number one priority."

Approval of Purchase Order with Wavetronix

On motion by Vice Chairman Eddie Cartwright and seconded by Chari Buckner, the Board of Public Utilities voted to approve a purchase order with Wavetronix in the amount of \$52,464.50 for Wavetronix radar vehicle detection equipment to upgrade failing loops at the intersections of Paul Huff Parkway & Bradley Square Mall, 20th & Parker Streets and Georgetown & Eureka Roads (county intersection). Bradley County will reimburse Cleveland Utilities for 100 percent of their costs, and the city's portion will be placed on the traffic light investment account. CU has been utilizing the Wavetronix detection system as the standard for several years and has seen excellent performance with little to no maintenance required. This is a sole source purchase.


OTHER BUSINESS

Future Board Meeting Dates

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

- Thursday, August 25, 2016, 3:00 p.m.
- Thursday, September 22, 2016, 3:00 p.m.
- Thursday, October 27, 2016, 3:00 p.m.

Amy Ensley
Utility Board Secretary


Chairman

8-25-16
Date