

**Board Of Water Works
REGULAR CALLED MEETING MINUTES
December 18, 2017**

Board Members Present:

Mr. Creighton Mershon, Chair
Dr. Sundeep “Sunny” Dronawat
Mr. Paul Esselman
Dr. Sharon Kerrick
Ms. Tierra Kavanaugh Wayne (via video teleconference)
Mr. Craig Willman

Not Present:

Mayor Greg Fischer

Others Present:

Mr. Spencer Bruce, President and Chief Executive Officer
Mr. Daniel Frockt, CFO, Louisville / Jefferson County Metro Government
Mr. Dave Vogel, Executive Vice President, Customer Service and Distribution Operations
Ms. Kelley Dearing Smith, Vice President, Communications and Marketing
Mr. Tim Kraus, Vice President, Production Operations and Chief Engineer
Dr. Tom Lockett, Vice President and Chief Information Officer
Ms. Lynn Pearson, Vice President, Finance and Treasurer
Mr. Terrence Spence, Vice President, Human Resources and Labor Relations
Mr. Michael Tighe, Vice President, Compliance, General Counsel and Corporate Secretary
Ms. Sue Purdy, Director, Finance and Accounting
Ms. Kim Reed, Director, One Water Liaison
Ms. Jenni Schelling, Director, Internal Audit
Mr. Kevin Kastensmidt, Director, Information Technology
Mr. Adam Carter, Union President
Mr. Andrew Winslow, Supervisor, Budget, Rates and Analysis
Ms. Laura Armistead, IT, Manager, Technical Services
Mr. Mathew Griffith, Strategic Planning & Performance Specialist
Ms. Beverly Soice, Paralegal

Visitors:

The regular called meeting of the Board of Water Works (BOWW) was held on Tuesday, November 21, 2017 at the Louisville Water Company (Louisville Water) located at 550 South Third Street, Louisville, Kentucky. Chair Creighton Mershon called the meeting to order at 11:10 a.m.

Minutes of the Previous Regular BOWW Meeting Approved

Dr. Sunny Dronawat moved to approve the Regular Called Meeting Minutes of November 21, 2017, seconded by Mr. Craig Willman and the motion was unanimously carried.

Staff advised the Directors of a 48-inch main break near the intersection of Clay and Oak Streets that occurred on Tuesday morning, December 12, 2017. Staff then provided a summary of the actions taken by the Company to isolate the site and completely turn off the water flowing from the break. This process included crews

working on over 60 valves in the ground. Due to the redundancy built in to the distribution system, water service was resumed to all customers in the affected area on Thursday, December 14.

Mr. Paul Esselman commended Louisville Water and its employees for the work done to get the main break under control. Mr. Dave Vogel stated that this main break affected almost every department in the Company.

Mr. Mershon inquired as to what caused the main to break. Mr. Spencer Bruce stated that we may never know exactly what caused the break. He added that a condition assessment was conducted approximately a year and a half ago during which 15 small leaks were found and repaired. This particular main is on Louisville Water's plan to rehabilitate; however, Louisville Water could not take down both the Eastern Parkway main and this main for repairs at the same time. The Eastern Parkway main had broken several times over the last eight years and was in greater need of repairs.

Mr. Daniel Frockt stated the Mayor would like to express his appreciation to Louisville Water employees for their handling of the main break.

Report Provided by the President/Chief Executive Office

Mr. Bruce advised Louisville Water provides employees an opportunity to join in philanthropic efforts with an annual Combined Giving Campaign. The initiative supports four charities: Fund for the Arts, Louisville Water Foundation, Metro United Way and Water for People. A team of employees coordinate the campaign that includes events at each location, a leadership breakfast, golf scramble and the opportunities for employees to contribute payroll deductions. This year's campaign raised just over \$159,000. Louisville Water has a history of supporting the communities we serve through philanthropy.

Louisville Water joined Kentucky's Economic Development Cabinet and representatives from across the state in Atlanta to promote opportunities for business. The trip was coordinated by Kentucky United, a member organization that links site selectors, commercial real estate agents and financing entities with state economic development representatives. Louisville Water had the opportunity to talk about its liquid assets in the region. We participate in at least four of these outreach events annually.

Mr. Mershon stated staff will be presenting the Homeserve agenda item out of order.

Homeserve Amendment Approved

Ms. Kelley Dearing Smith provided a summary of the relationship to date between Louisville Water and HomeServe USA. HomeServe provides warranty coverage for emergency home repairs for which the customers would otherwise be financially responsible. The warranty coverages available include coverage for water leaks/breaks and sewer leaks/breaks that occur on the customer's side of the property line, as well as, water heater and interior plumbing. HomeServe maintains a local, licensed and insured network of qualified contractors and manages claims and repairs and has a 24-hour call center available. Customers pay a monthly fee based on the coverage they select and the bill is included on the customer's Louisville Water bill.

Mr. Matthew Griffith provided a summary of the options currently before the Company with regard to its' relationship with HomeServe which include two options: bring the program in-house or negotiate new terms with HomeServe. Mr. Griffith reviewed the pros and cons of each option with the Directors.

Mr. Michael Tigue provided a summary of a proposed amendment to the existing contract which staff has negotiated with HomeServe.

After a short discussion, Dr. Dronawat moved to authorize the President and CEO to sign the amendment with HomeServe. Mr. Willman seconded and the motion unanimously carried.

2018 Tariff, Rate Schedule, Fees and Charges Approved

Ms. Lynn Pearson advised that at the November 21, 2017 meeting of the Board of Water Works, the 2018 Annual Budget was adopted and staff was directed to prepare rate schedules with an average rate increase of 86 cents a month or 3.5% for the average residential household using 5,000 gallons, effective for water service beginning January 1, 2018.

The proposed 2018 Tariff and Water Rate Schedule was developed in accordance with a cost of service study based upon the methods suggested in American Water Works Association Manual M1, Water Rates.

Staff recommended retail water rates increase January 1, 2018 and wholesale rates July 1, 2018. The wholesale rates will require approval by the Public Service Commission (PSC) for utilities that are under its jurisdiction. Once approved, staff will meet with wholesale customers and begin the process for obtaining approval from the PSC.

The Service Rules and Regulations authorize certain fees and charges for providing service to customers. Service Rule 1.03.3 authorizes service installation fees for specific sizes installed under typical construction conditions. Service Rules 1.14.1 through 1.14.16 authorizes service deposits and other account charges for items including late payments, returned checks, and service activation or deactivation. Service Rule 3.07 authorizes a system development charge (SDC) for all new services installed on public mains.

Dr. Dronawat moved to approve the 2018 Water Rate and Tariff effective January 1, 2018 for retail water customers and effective July 1, 2018 for wholesale customers, and the 2018 Customer Charges and Fees effective January 1, 2018. Mr. Esselman seconded and the motion unanimously carried.

Fourth Quarter 2017 Dividend Declared

Ms. Pearson advised it is appropriate to declare the Fourth Quarter Dividend per Section 508 of the Series 2009 Water System Revenue Bond Resolution. The 2016 annual audit has been completed. Net income of \$41,254,866 requires a total 2016 dividend to Louisville / Jefferson County Metro Government, Kentucky of \$19,821,376. The total dividends paid during 2016 were \$20,805,070. The difference between the dividend paid for 2016 and the actual dividend computed and declared for 2016 is \$983,694. This difference was deducted from the second quarter 2017 dividend payment as directed by Louisville Metro Office of Management and Budget.

The 2017 Annual Budget provides for a budgeted annual dividend of \$20,827,200. Mr. Willman moved to approve the following resolution to declare the fourth quarterly 2017 dividend in the amount of \$5,206,800.

WHEREAS, it has been the long established policy of Louisville Water Company to pay a dividend on its common stock related to its net earnings, after giving consideration to any requirements for debt amortization and bond reserve requirements, and

WHEREAS, a covenant written into the 2009 Water System Revenue Bond Resolution sets forth a formula for determining the amount of any such dividend, and

WHEREAS, such covenant requires payment of a dividend each year based on estimated annual adjusted net income, with adjustment upon completion of the annual audit to reflect any difference between estimated and actual net income, such adjustment to be made in the quarterly dividend payments of the following year, and

WHEREAS, an estimated dividend of \$20,805,070 was paid in 2016 based on estimated Adjusted Net Income of \$40,700,042 and

WHEREAS, the annual audit for 2016 has now been completed which establishes the full dividend for 2016 as \$19,821,376 based on actual Adjusted Net Income of \$37,754,866, and the resolution adopted in June 2017 amended the Board resolution of December 13, 2016 to decrease the 2016 annual dividend by \$983,694 from \$20,805,070 to \$19,821,376, and the difference was deducted from the second quarterly 2017 dividend payment, as directed by Louisville Metro, and

WHEREAS, the 2009 Bond Resolution requires that the Board of Water Works pay a quarterly dividend based on the formula contained therein, such quarterly payments to be as nearly equal in amount as possible, and

WHEREAS, the 2017 Louisville Water Company Annual Budget reflects the 2017 annual dividend to be \$20,827,200, it would be in order at this time to declare a regular fourth quarter dividend of \$5,206,800; therefore, be it

RESOLVED, the regular fourth quarter 2017 dividend of \$5,206,800 is hereby declared, and further

RESOLVED, that the President of the Company hereby is authorized and directed to pay \$5,206,800 to the Louisville / Jefferson County Revenue Commission on December 29, 2017, this being the fourth quarterly dividend for 2017.

Dr. Dronawat seconded and the motion unanimously carried.

Budget Increased and New Budget of Record Established for Project 15144 – BE Payne RBF Pump Modification

Mr. Tim Kraus advised the Capital Improvement Plan (CIP) includes funding for the modification of the River Bank Filtration (RBF) pumps at the BE Payne Water Treatment Plant (WTP) with a budget of \$461,133. Mr. Kraus provided the following summary.

The scope of this project includes removing one bowl from the bowl assembly of Pumps #1 and #4 and replacing the bowl assemblies for Pumps #2 and #3 to achieve desired operating conditions, which is anticipated to result in energy savings of approximately \$157,000 annually. The recommendation for these modifications was included in the 2015 Biennial Inspection.

A total of two (2) bids were opened on November 29, 2017 ranging from \$695,742 to \$903,555. The apparent low bidder was Layne Christianson Company with a bid of \$695,742. Based on the bid sequence and a quote previously received for this work, the low bid appears to be a fair market value. Based on the apparent low bid, design cost and estimated contract administration costs, and associated pump motor cleaning costs, the requested revised budget estimate is increased by \$373,609 to \$834,742.

Mr. Willman moved to increase the budget for Project 15144 – BE Payne RBF Pump Modification by \$373,609 and establish a new budget of record of \$834,742. Mr. Esselman seconded and the motion unanimously carried.

Contract Awarded and Budget of Record Established for Project 14330 – Crescent Hill Water Treatment Standby Generator

Mr. Kraus advised the Capital Improvement Plan includes funding for the construction of a new electrical/generator building at Crescent Hill Filtration Plant that will house three generators and associated electrical switchgear. Mr. Kraus provided the following summary.

The scope of this project includes construction of a new electrical/generator building housing, three (3) 2.5 megawatt diesel engine driven generators, three (3) 12,000-gallon above-ground fuel tanks, and 15 kV electrical

switchgear. Also included in the scope is a new access road and exit onto Frankfort Avenue including a new traffic signal light. A total of three (3) bids were opened on November 29, 2017, and the submitted bids ranged from \$10,427,000 to \$10,926,513.

The apparent low bidder is Pace Contracting, with a bid of \$10,427,000, which is \$927,000 or 9.76% above the engineer's estimate. The engineer performed a comparison of the engineer's estimate versus the bid tab and found differences in many of the eighteen line items. One of the most significant difference was the "Ten-year Standby Generator Maintenance Contract" item, in which our estimate was \$380,000 less than the apparent low bidder.

Based on the apparent low bid, design costs, contingency, and estimated contract administration costs, it is requested that the project budget be increased by \$1,263,608 to \$12,987,000.

Mr. Esselman moved to award Project 14330 – Crescent Hill Filtration Plant Standby Generators to Pace Contracting in the amount of \$10,427,000 and to establish a new budget of record of \$12,987,000 for this project. Mr. Willman seconded and the motion unanimously carried.

Budget Increase Ratified and New Budget of Record Established for Project No. 14139 – Poplar Level Road Area Main Replacement Project

Mr. Kraus reported the 2015 Main Replacement Program included the Poplar Level Road project, which was later combined with the Harrods Creek and Terry Road Main Replacement projects to obtain better bid pricing. The combined project included replacement of water mains along Concord Drive, E. Florence Avenue, Poplar Level Road at Audubon Hospital, Poplar Hill Road at Quarry Hill Road, Terry Road, Sky Blue Avenue, Deep Creek Court, River Road, and Woodhill Valley Road. Mr. Kraus provided the following summary.

During project design, it was determined that water mains needed to be upsized and/or changed from PVC to ductile iron pipe resulting in an additional \$55,000 in materials costs. The project was publicly advertised and the low bid was \$45,400 over the budget estimate. During construction, Louisville Water's Distribution Operations department asked that the two service tees for Audubon Hospital be replaced to improve service reliability for this critical customer. It was determined that a temporary water supply to the hospital would be required to maintain uninterrupted service during the installation of these new service tees. The additional service work at the hospital cost \$27,830. There was a delay in doing the tie-in at Terry Road due to the difficulty of obtaining a shutoff from the existing valves which resulted in an additional charge of \$1,540.

The project included the replacement of a main on Woodhill Valley Road. The existing water main on this road did not front the two last properties and the services to these two properties were nonstandard. The project included extending the main to the last two properties so that the services could be converted to a standard arrangement. One of the properties on Woodhill Valley Road and another on US Highway 42 were served by an old cross-country water main that was desired to be discontinued due to its remote location and poor condition. Private plumbing work was required to tie these two services as well as the remaining service on Woodhill Valley Road into a new main which cost \$36,185. In addition, Louisville Water budgeted \$5,000 to cut, plug and abandon the cross-country main that is no longer needed now that the two services have been removed.

Additional engineering and inspection time was required to coordinate with the hospital and customers on Woodhill Valley Road resulting in an additional \$38,000 in Louisville Water labor costs. An additional \$38,000 in materials was required to complete the project. Capital interest charges were \$15,223 more than budgeted. The total of all changes noted above is \$262,178 and yields a revised total project cost of \$1,288,878.

Dr. Sharon Kerrick moved to ratify a budget increased in the amount of \$262,178 for the Poplar Level Road Area Main Replacement Project and establishment of a new budget of record of \$1,288,878. Mr. Esselman seconded and the motion unanimously carried.

Unbudgeted Capital Project Ratified: 342-17-0121 – Oak Street 48-inch Main Break

Mr. Kraus reported at approximately 7:30 a.m. on Tuesday, December 12 a main break occurred on the 48-inch transmission main at the intersection of S. Clay and E. Oak Streets. The break occurred on a 48-inch cast iron water main that was installed in 1893. This main is a major transmission line supplying distribution mains throughout the City and is a key artery for the transmission of water between the Crescent Hill Filtration Plant, downtown, and the Cardinal Hill Reservoir. Mr. Kraus summarized the Company's response to the main break as set out below.

Louisville Water crews immediately mobilized to the site along with support from Metro Police, Metro Fire Department, Metro Public Works, LG&E, MSD, EMA, Red Cross, and others. A Boil Water Advisory (BWA) was issued for approximately 4,000 customers, since water pressure may have dropped below 20 psi during the event. Normal water pressure was restored to the service area by 6:00 p.m. on Tuesday evening. The BWA was lifted on Wednesday, December 13 at 2:54 p.m. The 48-inch transmission main break also severed a 6-inch main that supplies approximately 30 residents on E. Oak Street. Water service to E. Oak Street was restored on Wednesday at 5:15 p.m., and a BWA was issued for this area until confirmation sampling and testing was completed. It is estimated that 20 million gallons of water was released during this event.

Louisville Water set up an incident command structure and engaged personnel from across the Company to manage the situation. Louisville Water crews continued to work throughout Tuesday night and into Wednesday morning to obtain water shutoff at the break site. Southern Pipeline Construction Co., Inc. was mobilized on Tuesday night through the Transmission System Repairs and/or Capital Improvements contract per Capital Projects Authorization Procedure 5.21 – Exigent Work Provisions to excavate the site, complete repairs and restore the damaged roadway. Similarly, MAC Construction & Excavating, Inc. mobilized on Thursday, December 14 to assist in the replacement of a 24-inch and a 48-inch transmission main valve that was broken while attempting to shut-off water to the break area. Replacement of the damaged main, valves and roadway is estimated to cost \$715,000.

Mr. Esselman moved to ratify the unbudgeted capital project in the amount of \$715,000 to repair damaged valves and the 48-inch main at the intersection of E. Oak and S. Clay Streets. Dr. Dronawat seconded and the motion unanimously carried.

One Water Dell EMC Transformation License Agreement Approved

Mr. Kevin Kastensmidt reported that Louisville Water has relied on Dell EMC storage-related infrastructure since 2002 to manage and safeguard its enterprise data. Through the One Water initiative, Dell EMC was chosen as the primary solution provider for enterprise storage and backup and recovery systems. In 2015, Louisville Water and Metropolitan Sewer District (MSD) collectively worked to develop a shared Network Attached Storage (NAS) and backup and recovery solution resulting in an \$836,822 savings.

Mr. Kastensmidt explained that each year, Louisville Water and the MSD budget for capital and operating expenses designated towards storage and backup and recovery infrastructure. The cost breakdown for these items includes hardware, software, and maintenance. Even with a hardware only purchase, there is an associated software cost. In preparing plans and budgets, there was a review of a Dell EMC Transformational License Agreement (TLA) to better manage spending. A TLA is a software agreement that decouples the software from hardware, allowing license portability during technology refresh cycles, flexibility to exchange

software if strategies change, operational efficiencies via maintenance contract consolidation, and significant software spend reduction via economies of scale.

Mr. Kastensmidt stated approval is being requested for a four-year TLA. The foundation of the TLA is the planned changes and growth to our Dell EMC systems. Both Louisville Water and MSD worked with Dell EMC and their partner RoundTower Technologies to plan the next four years. This became the basis of the four-year TLA. It includes improvements to the XtremIO storage system, Isilon Network Attached Storage, Data Domain and Networker backup and recovery environment, Storage Reporting and Monitoring (SRM) Suite, and other related items. The TLA includes the software and related maintenance costs.

With the TLA, Louisville Water and MSD will still need to make the hardware capital purchases with associated maintenance for items in the TLA. However, the cost will be reduced because the software and its associated operating costs are already included in the TLA at a fixed cost over the term. Software only items, such as the Networker and SRM products, are fully included in the TLA. The software license and maintenance fees are fixed across the term of the agreement with annual payments.

Without the TLA, Louisville Water and MSD are projected to spend \$5.2M in software and software maintenance over four years. With the TLA, the cost is reduced by approximately \$1M over the four years with over \$769,000 dollars in operating savings and \$311,000 in capital savings.

Mr. Kastensmidt advised that due to multiple technology refreshes and maintenance expirations in 2018, the TLA provides an opportunity to reduce costs. The TLA will drive software spending down 21% and yield cash flow savings over \$800,000 in the first year. It also allows the addition of the SRM software to our environments to aid in management and capacity planning with a 21% reduced cost.

As One Water, we can increase our savings potential. MSD is not large enough to qualify for the TLA program on its own but does positively impact the overall buying power. If Louisville Water were to utilize the TLA on its own, the savings would be 17%, a reduction of \$147,000 or 4%.

Mr. Kastensmidt reported the total purchase amount to RoundTower Technologies, a Dell EMC partner, will be \$4,072,304 consisting of four annual payments of \$1,018,076. MSD will reimburse Louisville Water \$431,061 annually for a total of \$1,724,244. The overall budget impact to Louisville Water will be \$587,015 annually for a total of \$2,348,060. By purchasing together, not including labor and knowledge savings from continuing to utilize a common storage and backup and recovery platform, a One Water savings of \$1,080,649 will be realized.

Mr. Kastensmidt advised this item is being presented to the MSD Board for its approval today.

Dr. Dronawat moved to approve the One Water purchase of the Dell EMC Transformational Licensing Agreement for \$4,072,304 with the understanding that reimbursement from MSD in the amount of \$1,724,244 will be provided. Mr. Esselman seconded and the motion unanimously carried.

2018 Board of Water Works Regular Meeting Dates Approved

Mr. Michael Tigue advised that dates for the 2018 Regular Board of Water Works meetings have been proposed as followings: Tuesday, January 23, Friday, February 16, Tuesday, March 20, Tuesday, April 17, Tuesday, May 22, Tuesday, June 19, Tuesday, July 17, Tuesday, August 21, Tuesday, September 18, Tuesday, October 23, Tuesday, November 20, and Tuesday, December 18.

Mr. Willman moved to approve the above referenced meeting dates for regular meetings of the Board of Water

Works for 2018, seconded by Mr. Esselman and the motion unanimously carried.

All 2018 regular monthly meetings will begin at 11:00 a.m. The annual meeting in April will begin at 12:30 p.m., but the regular meeting will occur beforehand at 11:00 a.m. All meetings will be held at the John L. Huber Corporate Headquarters.

Oldham County Advisory Board

Mr. Dave Vogel stated in the interest of time the Board take this report under advisement.

Mr. Mershon stated the item concerning an Employee Personnel Issue will be discussed in closed session.

Financial Report Given

Ms. Pearson summarized the Financial report for November.

November was a challenging month financially for the Company, with lower water consumption driving water sales below budget for the month. Other operating revenue was also under budget for the month, resulting in an overall shortfall in operating revenue of 2.8%. Operating expenses also performed unfavorably compared to budget, resulting in net income for the month that was 15.5% less than budgeted.

Consumption of 2.9 billion gallons for November 2017 is 147 million gallons lower than budget, and 226 million gallons lower than November 2016. Year-to-date consumption remains under budget by 2.2%, and essentially flat to prior year. The residential, commercial and industrial customer classes are the main contributors to the unfavorable budget variance for the year-to-date period.

Water Revenue for November 2017 is \$410,000 under budget and \$617,000 lower than the prior year. Water revenue through November is \$2.3 million lower than budget and \$5.2 million higher than last year. Lower consumption continues to be the key factor driving lower water revenue compared to budget for the year-to-date period.

Other Operating Revenue for November is \$41,000 lower than budget but is \$78,000 higher than year-ago levels. For the period-to-date, other operating revenue is \$198,000 lower than budget and \$1.0 million over prior year. The year-to-date variance to budget is driven by revenue shortfalls in service line protection, strategic initiatives and contract operations, offset in part by higher late fees and disconnect fees. The variance in other operating revenue compared to prior year through November is primarily due to higher sewer billing and contract revenue.

Operating and Maintenance Expenses for November of \$6.1 million are \$300,000 higher than budget and \$95,000 higher than November 2016. The November variance from budget is driven by higher overtime, contractual services and bad debt expense, offset by lower insurance reserves. The November variance to prior year is attributable to higher labor and labor related expenses and higher chemical costs, partially offset by lower contractual services and lower insurance reserves. November year-to-date operating and maintenance expenses are \$1.8 million under budget and \$1.2 million higher than year-ago levels. The majority of the year-to-date favorable budget variance is in labor and labor related expenses, contractual services, chemicals and materials and supplies costs, partially offset by higher bad debt expense. The labor variance is a result of full and part-time vacancies along with more costs assigned to capital projects than planned. Contractual services are lower primarily due to lower expenses for CC&B consulting support, Facilities Maintenance, IT and Economic Development consulting which were budgeted in the first eleven months of 2017 but have not been incurred. The year-to-date favorable variance in materials and supplies is due to fewer main breaks than anticipated, a

lower amount of purchases of metering supplies and materials, along with various materials and supplies for pumps and tanks in the water production area budgeted earlier in the year, but not yet incurred.

Total Operating Expenses for November of \$11.1 million are \$317,000 higher than budget and \$495,000 higher than November 2016. Total operating expenses year-to-date are 1.8% lower than budget but are 3% over year-ago levels. The year-to-date budget variance is mainly due to lower operating and maintenance costs and loss from disposition of property.

Non-Operating Income through November is \$100,000 higher than budget and \$6,000 lower than same period through November 2016. Interest income is above budget primarily due to higher cash position than planned.

Non-Operating Expense through November of \$7.7 million is \$49,000 less than budgeted and \$364,000 less than year-ago levels. Interest expense is less than prior year due to significant payments on bonds made in November 2016.

Net Income before Distributions and Contributions for November is \$4.0 million, which is \$731,000 lower than budget. In comparison between years, net income for November is \$1.1 million lower than November 2016. November year-to-date net income of \$46.1 million is \$149,000 lower than budget and \$3.2 million more than the eleven months ended November 2016.

Contributions through November of \$8.2 million are \$1.8 million higher than budgeted and \$866,000 lower than prior year.

Temporary Cash and Reserves totaled \$81.8 million at the end of November 2017, which is in excess of 250 days of estimated Operations and Maintenance expense of \$52.2 million.

Communications and Marketing Report Given

Ms. Dearing Smith summarized the Communications and Marketing report for November.

In December and January, Louisville Water is part of a documentary airing on Kentucky Educational Television (KET) called "Downstream." This 30-minute program highlights Kentucky's "liquid" assets including lakes, rivers, drinking water, bourbon and brew. Downstream Kentucky highlights Louisville Water's history, innovation in drinking water and our connection to the state's signature industries. The program airs multiple times on KET and will also be featured at LiquidKentucky.com.

The Louisville Downtown Partnership recently produced a video to highlight the many reasons to visit downtown. Louisville Water's mascot, Tapper, was part of the video. Tapper appears on board the Thirsty Peddler, a popular way to see the city and enjoy a social hour.

Customer Service and Distribution Operations Report Given

Mr. Vogel summarized the Customer Service and Distribution Operations report for November.

Call Center operations received 34,965 calls in November with an abandonment rate of 17.7%. The Average Speed to Answer for the month was 7:19 m:s, which is favorable to last year and the five-year average. We saw some of our busiest days the week after the Thanksgiving holidays. Eight (8) new CSRs started on the phones December 11, which will have an immediate positive impact on our service levels. Staff plans on hiring another group of CSRs in January to help offset our normal turnover for the area.

The main break activity for the month of November was slightly lower than last year and slightly higher than the five-year average. Seventy-two (72) main breaks occurred during the month and year-to-date our break activity is running significantly lower than past periods. Activity has picked up during the last week of November and into December.

The Louisville Water Emergency Plan was updated in November. The Emergency Plan actions were reviewed and all preparations are on schedule for the upcoming winter season.

Bad debt continues to run higher than budget but staff is making progress. Bad debt for the month came in at \$177K which is lower than last year and higher than the five-year average. The cross functional team continues to implement process changes and we are also planning calls to benchmark with Phoenix Water and LG&E to learn from their operations. A sign of progress is that our aged receivables over 60 days are down over \$350K versus last year at this time.

The volume of non-payment turn-offs and turn-ons remained flat compared to November 2016. Staff has made significant improvements to the aging of field orders over the last several months. The average age of disconnect for non-pay orders has been reduced from approximately 25 days to 8 days, and the average age of plug/lock orders has been reduced from approximately 30 days to 9 days.

The remaining Advanced Metering Infrastructure (AMI) vendors were invited in for final interviews during the first week of December. Staff is going through the final steps in the selection process and a recommendation is forthcoming.

Engineering and Production Operation Report Given

Mr. Kraus summarized the Engineering and Production Operations report for November.

Expenditures through November totaled \$62,855,741, which is \$7,134,521 or 12.8% higher than the same period last year. These expenditures equate to 58.37% of the 2017 total capital program of \$107,688,879.

The amount of water produced and delivered to the system in November 2017 was 114.9 MGD, which is 7.1% higher than November 2016 and 7.5% higher than the November five-year average. Year-to-date, the amount of water delivered to the system is 1.0% higher than 2016, and 1.5% lower than five-year average.

There was a total of five chemical spills reported by ORSANCO during the month of November: three upstream and two downstream of Louisville Water's Zorn intake. Activated carbon was applied in response to the incident involving the warehouse fire in Parkersburg, WV. There were no volatile organic compounds detected in any of the water samples related to this incident.

Staff monitored 1,153 water quality parameters of a required 993 per federal and state regulatory requirements with zero violations, including Fort Knox and River Ridge systems.

Staff collected 283 compliance distribution samples. There was one positive total coliform and zero *E-Coli* results. All internal water quality goals were met. Staff also collected 132 main break samples on 66 repairs in the month, of which five localized boil water advisories were issued due to field conditions and one was issued due to water quality monitoring results. There was a total of 11 water quality customer complaints, in comparison to the five-year average of 14 complaints.

Human Resources Report Given

Mr. Terrence Spence and Mr. Adam Carter provided a summary of recent and current activity between the Louisville Water's Labor Management and Local Union 1683 of the American Federation of State, County and Municipal Employees, AFL-CIO (the Union).

To date there are two (2) active grievances; both grievances are in the Step 4 process of resolution.

A proposal to improve Union employee emergency call-out response was voted down by the Union body on November 22.

The Company posted seven (7) regular full-time classified and one (1) temporary classified positions for union employee's internal bidding process.

The Company is extending offers to 13 regular full-time General Laborer candidates with a mid-January 2018 start date.

The Company and Union Insurance Team met with representatives from AON (insurance broker) to review 2018 health insurance benefit presentation proposals from Anthem and United Healthcare for feedback and recommendations.

The Executive Union Management Alliance Council (EUMAC) met on December 7 to review and confirm the Council's charter.

Information Technology Report Given

Mr. Kastensmidt summarized the Information Technology Report for November.

Work on the Oracle Work & Asset Management (WAM) Implementation continues on schedule. Technical Design sessions have begun with IT's focus on integrations and system environment planning.

The PeopleSoft 9.2 Upgrade project completed one week early and went live on December 2, 2017. This upgrade aligns Louisville Water with Oracle's Continuous Delivery Program which eliminates the need for major upgrade projects in the future.

Staff is currently working on the Oracle Support Request for Proposal (RFP) for support of the Louisville Water's Oracle software suite. This project will include Financials (EBS), Customer Care & Billing (CC&B), Work & Asset Management (WAM), Service Oriented Architecture (SOA), and PeopleSoft HR & Payroll.

Closed Session

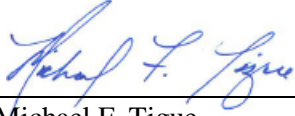
Mr. Esselman moved to go into closed session at 1:50 p.m. pursuant to KRS 61.878(1)(c) and (f) to discuss proposed or pending litigation and employee matters. Mr. Willman seconded, and the motion unanimously carried.

Resume Open Session

Dr. Dronowat moved to return to open session at 2:25 p.m., seconded by Mr. Willman and the motion unanimously carried.

There being no further business for the Board, Mr. Willman moved to adjourn at 2:25 p.m., seconded by Dr. Dronawat and the motion unanimously carried.

Respectfully submitted,



Michael F. Tighe
Vice President, Compliance, General Counsel
and Corporate Secretary