Board of Municipal Utilities
Meeting Minutes
February 20, 2024
201 Miller Road
Avon Lake, Ohio

Call to Order – Roll Call

The meeting was called to order at 6:30 PM. The meeting was held in-person using web-based video conferencing technology. A recording was posted to Facebook and YouTube on February 21, 2024.

Present: Mr. Abram, Mr. Dzwonczyk, Mr. Rickey, Mr. Rush and Mrs. Schnabel.

Also present: CUE Munro, CUO Yuronich and WFP Manager Gibboney.

Approve Minutes

Mr. Dzwonczyk presented the Minutes of the February 6, 2024 regular meeting. With no additional changes, additions or corrections noted, he ordered that the minutes stand and be distributed as presented.

Public Speakers

None.

Correspondence

None.

Expenditures

Following review of expenses for funds and amounts as follows, Mr. Abram moved, Mr. Rickey seconded, to approve the expenditures of February 2 through February 15, 2024:

Water Fund 701	$	228,702.82
Wastewater Fund 721	$	212,506.40
ETL1 Fund 703	$	175,046.98
ETL2 Fund 762	$	420,591.66
LORCO Fund 749	$	12,279.39
Water Construction Fund 704	$	224,249.26
Wastewater Construction Fund 724	$	168,191.05

Ayes (per voice vote): Abram, Dzwonczyk, Rickey, Rush, and Schnabel
Nays: None
Motion carried.

Water Filtration Plant Operator

Mr. Munro stated that a recent addition to our staff at the Water Filtration Plant, Brandon Brown had just earned his Ohio EPA Class III Water Supply Operator license and will be promoted from Step II to Step III on the pay scale effective February 2, 2024. Mr. Munro informed the Board that Brandon has been doing a great job and was a much-appreciated member of our team. Mr. Munro also added that another recent hire, Brandon Benitt, had passed his OEPA Class II examination and would hopefully have his license in time for the next meeting. Mr. Munro stated that there was much pride in both the older employees and the new additions.

At 6:51 PM Mr. Munro announced that he would be leaving the meeting to attend the Avon Lake City Council Meeting and was excused.

Mr. Yuronich was invited up to the dais to take the seat vacated by Mr. Munro for the remainder of the meeting.

Project Updates

Power Plant Update: Mr. Yuronich informed the Board that the building that had previously housed the equipment that treated the coal pile runoff was slated to be demolished. Mr. Yuronich stated that the Ohio EPA had determined that all industrial activity had ceased and it was deemed a storm water retention pond that would no longer require treatment prior to being discharged into the storm sewer.

Mr. Dzwonczyk asked if the demolition was being done by Charah and if there were any additional environmental testing that needed to be done? Mr. Yuronich replied that it was being demolished by Charah and there was no environmental testing that needed to be done that was not already completed.

ETL Design Services: No update.

WFP Improvements: Mr. Yuronich stated that the CUE had spoken with Ohio Water Development Authority (OWDA) and they reported that there should be no reason the project will not be approved for funding at their meeting on February 29, 2024 and that ALRW could reach out to them the following day for verbal confirmation of the award with written confirmation to be received shortly thereafter.

Additional Storage Building: Mr. Yuronich reported that the ALRW Engineering staff coordinating with North Bay Construction, HydroChem and SecuriTec to address the access control integration as that was not covered under the original contract. Mr. Yuronich informed the Board that there were some errors in the wash program related to the integration of the access control and wash cycle that the three parties were working together on to resolve. Mr. Yuronich also added that a card reader with multiple heights for small and large vehicles was being installed to ensure only ALRW staff will have access to the building and wash bay areas.

Mr. Dzwonczyk inquired about the length of time needed before the system was fully operational and Mr. Yuronich responded that although no exact timeframe was given to staff the companies estimated two and a half to three weeks.

Inductively Coupled Plasma Mass Spectrometer (ICP): Mr. Yuronich informed the Board that staff continues to develop the test methodology and reiterated that the parallel testing with a third-party laboratory was still contributing to the higher expenses in the water and wastewater funds and that once testing is able to be performed fully in-house, the costs in those subcategories will begin to stabilize.

CUE/CUO Report

Mr. Yuronich reported to the Board some updates on a recent situation experienced by the Water Filtration Plant. Mr. Yuronich stated that on February 2, 2024, there were some IT equipment failures, specifically fiber optic converters (FOCs). Mr. Yuronich further explained that there is a fiber optic loop that handles communication between programmable logic controllers (PLCs) that convert the information from being transmitted through fiber optics to ethernet cables that can be received by the computers that host the SCADA program. One of the FOCs failed in a matter that the equipment did not stop communicating but began sending and receiving duplicate data information packets that overloaded the network with information and caused communication issues. Mr. Yuronich stated that upon evaluation by staff and our system integrator it was found to be a known problem that could be remedied by performing a firmware update. Mr. Yuronich stated that an error was found that after 478 days without a reboot of the FOC it could potentially experience the issue. Mr. Yuronich stated that the FOC modules were over ten years old and plans had been in the works for several months to replace them. Mr. Yuronich added that all PLCs performed as expected by holding their last known value except for one area. The PLC that controls the pressure setpoint introduced a higher-than-expected pressure in the distribution system which led to several breaks.

Mr. Dzwonczyk inquired if there was some sort of software that would limit the maximum pressure that the high service pumps could ever reach and bring the pressure more slowly. Mr. Yuronich responded that the problem was that due to the network being overloaded, the information the PLCs controlling the high service pumps saw was that the pressure was low in the distribution system and that the pumps were increasing pressures slowly but since they saw low pressure, they kept increasing their speed.

Mr. Rush asked how redundancy can be built into the system and how does staff rely on one piece of equipment for this control? Mr. Yuronich replied that he has a report from ALRW's system integrator outlining the equipment and safeguards that are built into the SCADA system and a summary of what went right and where improvements could be made. Mr. Yuronich stated that there are more complications than just setting limits in the PLCs as the integrators have to work on the timings and setpoints so that transient increases falsely cause a pump to shut down or slow down but that would have to be some careful planning and tuning of the programming to ensure that no unintended consequences are introduced. Mr. Rush stated that there must be a way to have multiple sensors regulating this to prevent this from happening again and that he would like to receive a report of the corrective action that was taken.

Mr. Gibboney added that there are in fact three separate pressure sensors throughout the facility and that the issue was not a failure of any of the pressure sensors but that the data storm prevented the correct pressure values from being communicated to each of the two high service pump station PLCs. Mr. Gibboney stated that the pump stations would operate with conflicting information where one pump station would see a high pressure and attempt to slow to idle while the other would see low pressure and attempt to speed up until their maximum output was reached.

Mr. Rickey inquired about the response of the WFP operator and if there was anything different they could have done or if additional staff training was needed. Mr. Rickey stated that he also had spoken with the distribution crew while they attended to the break on his street and wondered if the breaks all occurred on streets that had waterline replacement planned. Mr. Yuronich stated that there was nothing different the operator could have done and that he felt they acted appropriately and commended the operator's performance. Mr. Yuronich stated that the operator immediately began calling for additional maintenance staff to assist in the troubleshooting. Mr. Yuronich stated that the operator followed their checklist to ensure that all treatment chemicals were being fed correctly to ensure the safety of the water and that they

discovered the pressure issues as they got to that point on the checklist. Mr. Yuronich also stated that most of the breaks occurred on streets that are scheduled for replacement. Mr. Yuronich stated that there have been numerous calls with the system integrator to develop a plan to ensure this doesn't happen again. Mr. Rickey stated that there will always be failures, but it is important that you don't experience the same failure a second time. Mr. Rickey also asked where the pressure sensors are located. Mr. Yuronich responded that there is a pressure sensor in each of the high service pump stations along with a backup in the south high service pump station that staff can normally select which one is in control of the pumps but in this situation each pump station was receiving incorrect information due to the data storm. Mr. Rickey also asked what the normal operating pressure setpoint in ALRW's system was. Mr. Yuronich stated that seventy-six pounds per square inch is the standard operating pressure. Mr. Rickey reported that as a backflow tester he has seen very consistent pressures throughout ALRW's system and that other cities have a much higher variance throughout their distribution systems.

Mr. Dzwonczyk stated that he wants to make it clear that the Board wants to be made aware of the updates that will be made to prevent a reoccurrence of this issue. Mr. Yuronich responded that staff will resolve the issue and an update and analysis will be conveyed to the Board in the near future.

Mr. Abram inquired how many breaks resulted from the pressure increase. Mr. Yuronich stated that there were six.

Mr. Dzwonczyk stated that he would like to see diagrams and a sequence of events outlining the failure and Mr. Yuronich stated that would take place in the near future.

Miscellaneous & Member Reports

Mr. Rickey stated that the CUE had done a good job of recognizing it but wanted to reiterate what a significant accomplishment it was to earn an OEPA Class III treatment license. Mr. Rickey added that it speaks highly of ALRW that so many of the staff are interested in bettering themselves and making this a career.

Public Speakers

None.

Adjourn

As there was no further business, Mr. Abram moved, and Mr. Rickey seconded, to adjourn. The meeting adjourned at 7:48 PM.

Ayes (per voice vote): Abram, Dzwonczyk, Rickey, Rush and Schnabel
Nays: None
Motion carried.

Approved March 5, 2024.

John Dzwonczyk, Chairman Robert Munro, Clerk