

PROCEEDINGS OF THE CENTRAL BROWN COUNTY WATER AUTHORITY
TECHNICAL COMMITTEE

Pursuant to §19.84 Wis. Stats, a regular meeting of the **Central Brown County Water Authority – Technical Committee** was held on Tuesday, November 5, 2019 at the Bellevue Public Safety Building Conference Room – 3100 Eaton Road, Bellevue, Wisconsin

Members Present: Allouez – Sean Gehin, Mike Mahloch
Bellevue – Shawn Geiger
De Pere – Scott Thoresen, Eric Zygarlicke
Howard – Geoff Farr
Lawrence – Kurt Minten
Ledgeview – Andy Tenor

Also Present: Nic Sparacio, Manager
Rob Michaelson – Manitowoc Public Utilities
Don Voogt – McMahan, Inc.
Gary Rosenbeck – McMahan, Inc. (via telephone)

The November 5, 2019 Central Brown County Water Authority – Technical Committee Meeting was called to order at 1:30 p.m. by Chairman Shawn Geiger of Bellevue.

Roll Call:

1. Attendance was recorded as shown above.

Approval of Agenda:

2. Approve Agenda
There was a request to take item 8.f. after approval of the minutes. Chairman Geiger agreed to take item 8.f. after item 3.

Motion made by De Pere, seconded by Lawrence to approve the agenda.

MOTION UNANIMOUSLY APPROVED

Approval of Minutes:

3. Manager Sparacio noted that there was a spelling correction on page 6. There were no further questions or comments on the October 8, 2019 minutes.

Motion made by Lawrence, seconded by De Pere to approve the October 8, 2019 minutes as corrected.

MOTION APPROVED UNANIMOUSLY

Appearances:

4. None

Communications:

5. None

Agenda Items:

6. Water System Improvement (Contract A) pay request #2 from Reeke-Marold, Inc. Manager Sparacio stated that this is the second pay request for the Howard Booster control valves project. The contractor is billing for 41 percent completion of the project. The pay request has been reviewed and approved by McMahan. Don Voogt added that the contractor is nearly completed with the project at this point.

Motion made by Lawrence, seconded by Allouez to recommend to the Board payment to Reeke-Marold, Inc. in the amount of \$44,784.90.

MOTION UNANIMOUSLY APPROVED.

7. Water System Improvement (Contract B) pay request #3 from Reeke-Marold, Inc. Manager Sparacio stated that this is the third pay request for the automatic chlorine shut-offs project. The contractor is billing for 99 percent completion of the project, less retainage held. The pay request has been reviewed and approved by McMahan.

Motion made by Howard, seconded by Allouez to recommend to the Board payment to Reeke-Marold, Inc. in the amount of \$9,044.10.

8. Project status updates

- a. **County Trunk Highway R bridge replacement project**

Sparacio stated that the report from Vibra-Tech has been provided to Brown County staff and their engineers. They have indicated understanding and acceptance of the report recommendations. The DOT will provide at least one week's notice prior to the start of pile-driving so that we can be prepared to adjust pressure in the transmission main if needed.

- b. **Chlorine Analyzer maintenance and possible replacements**

Sparacio stated that he does not have any updates this month, but the item is on the agenda for continued communication on the related issues. Members reported varying success with attempted repairs over the last month. Some analyzers are working better, and some are continuing to have problems.

Eric Zygarlicke explained that in De Pere, Hach has installed a newer analyzer in parallel with an existing unit, and the newer one is not showing the same drops in readings. He added that he and his operator were in a station at the moment when a drop occurred, so they analyzed the chlorine level in the water with another instrument at the same time. The sample confirmed that the actual chlorine levels are not dropping as shown by the analyzer. This is confirmation that something in the CL17 analyzer is failing to read correctly for several minutes at a time.

Mike Maholch stated that in Allouez, they had a CL17 analyzer replaced with a refurbished unit. The refurbished unit showed the same drops in readings as the original unit. Discussion continued on the various operating modes available on the CL 17s.

c. **Howard Booster By-Pass project and modified system pressure**

Zygarlicke explained the over-chlorination incident that took place on Friday, October 25 in a portion of the water system on the west side of De Pere. The utility crew in De Pere responded immediately by shutting down the chlorination system at the affected connection station, sampling to identify the extent of the impacts in the distribution system, providing public notice, and flushing the affected water mains. A portion of the Town of Lawrence was also affected, and utility staff in Lawrence assisted with the public notice and flushing efforts. There were no reported issues with customers affected by chlorine. Most of the calls received were about the low pressure (caused by the hydrant flushing), and to confirm that the incident was all clear.

Discussion ensued regarding the potential causes of the over-chlorination. There was a consensus that the likely cause was a failed Smart-valve in the chlorination system that was triggered by increased system pressure during testing of the Howard Booster by-pass project. None of the other connection stations experienced the same chlorination issue. The Committee discussed potential improvements to the plumbing and valving of the connection stations that would eliminate the possibility of this kind of failure in the future for the De Pere station and other connection stations.

Scott Thoresen asked for clarification on the cost responsibilities for any modifications needed in the connection stations. He added that there have also been questions for many years as to the need for downstream chlorine analyzers to confirm levels post chlorination. Sparacio responded that the fix should be determined as soon as possible and then continue discussions on how to fund it between local and Water Authority resources. This also seems to be an opportune time to look at addressing the need for additional downstream analyzers, given the various chlorination related issues currently taking place.

The Committee agreed to the following action plan:

- MPU will communicate with all Members regarding the timing and will then bring the system pressure back up to recreate the conditions.
- Members will monitor their chlorination valves/systems for excessive vacuum and any potential malfunctions during this test period.
- De Pere will coordinate with its vendor, CTW, to assess performance of the suspect valve.
- The Committee will meet again to determine the fix to the connection stations. The cost responsibilities can then be discussed at that time as well.
- Until the issue is fully addressed, MPU will boost chlorine at the MMS by 0.1 mg/l to maintain higher residual. The target will be a residual of 0.9 to 1.0 mg/l at the MMS.

d. **Transmission system operation and maintenance**

Sparacio introduced the draft Transmission Main Operation and Maintenance Program Manual from MPU. He noted that he and Gary Rosenbeck have reviewed the document and just recently forwarded comments to Rob Michaelson. But these are minor items,

and the document is largely complete. This was a solid effort by MPU to put this together. Michaelson added that it was beneficial to put the plan together just to document everything they do. There were no questions on the draft. Sparacio stated that he will work through the review comments with Michaelson, and then come back to the Technical Committee for action once it is complete.

e. **Water System Improvement projects**

Voogt stated that the Chlorine Shut-offs project is essentially complete, and the Pipeline Repair materials project is going well. The 48-inch valve is currently being coated with the required paint system.

f. **Manitowoc Pump Station Optimization project**

Sparacio provided an overview of the Finished Water Pump Station Optimization report from Jacobs Engineering. He reviewed the goals for doing the study in cooperation with Manitowoc Public Utilities, the key findings of the study, the alternatives considered and recommended, the implementation details and costs, and the next steps moving forward.

Gary Rosenbeck stated that the study can be summed up in that the pump station needs two additional VFDs, and a new control system is needed so that it no longer needs to be operated in manual. He added that the potential surge issues discussed by the report need to be addressed. Sparacio noted that one outstanding question is whether the study meets the scope requirement of being a preliminary design. Rosenbeck added that he was looking for more implementation details as well.

Michaelson responded that the number of alternatives needs be narrowed down and accepted by MPU and the Water Authority. Those steps are needed to refine the direction before finalizing as a preliminary design report. Rosenbeck noted that MPU and McMahon have many of the control strategy details for current operations already worked out.

Sparacio stated that he is not looking for Committee action on the report at this time. He will keep the Committee updated as the process moves toward preliminary design and bring the final report back for action when it has been completed. Rosenbeck left the meeting at this time.

g. **Sensus AMI software updates**

Sparacio asked the Members how the software cutover is going. Geiger responded that Bellevue systems are working well now. Zygarlicke responded that De Pere is now experiencing a communication loss, but a Sensus work order has already been submitted. This may be a software or hardware issue. There were no issues noted for Allouez or Howard.

h. SPLASH Study

Sparacio reported that the final presentation for the SPLASH Study has been set for Thursday, November 14. Once that is complete, he will schedule a meeting for continued discussion of cross-connection control program opportunities.

9. Water sales report through October 31, 2019

Sparacio noted that October water consumption was down in comparison with last month. He reviewed the comparison to budget and the MPU take-or-pay projection. In addition, the impact of the leak repair last month was apparent in the meter readings.

Michaelson reported on the leak repair on the far west end of the transmission main in Hobart. The evidence of the damage to the pipe was provided as a claim to the electrical contractor that likely did the damage. A full invoice will be developed once MPU has gathered all the related charges. Thoresen suggested that Wisconsin Public Service also be contacted with this information, since the contractor was working for them.

Old Business:

10. None.

Next Meeting:

11. Agenda Items for the Thursday, December 5, 2019 Meeting

Possible agenda items for the next meeting were discussed including the following.

- a. Maintenance services for chlorine system automatic shut-offs
- b. Bayshore Development in Manitowoc
- c. Risk and Resiliency Planning (American Water Infrastructure Act)
- d. 2020 Tech Committee officers

Adjourn:

Motion made by De Pere, seconded by Ledgeview to adjourn at 3:25 p.m.

MOTION UNANIMOUSLY APPROVED

Respectfully submitted,
Nic Sparacio, Manager