

PROCEEDINGS OF THE CENTRAL BROWN COUNTY WATER AUTHORITY
TECHNICAL COMMITTEE

Pursuant to Section 19.84 Wis. Stats, a regular meeting of the **Central Brown County Water Authority – Technical Committee** was held on Tuesday, March 12, 2019 at the Bellevue Public Safety Building Conference Room – 3100 Eaton Road, Bellevue, Wisconsin

Members Present: Bellevue –Dave Betts, Shawn Geiger
De Pere – Scott Thoresen
Howard – Geoff Farr
Lawrence – Kurt Minten
Ledgeview – Dave Strelcheck

Members Excused: Allouez

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

The March 12, 2019 Central Brown County Water Authority – Technical Committee Meeting was called to order at 1:35 p.m. by Chairman Dave Betts of Bellevue.

Roll Call:

Attendance was recorded as shown above.

Approval of Agenda:

1. Approve Agenda
Motion made by De Pere, seconded by Howard to approve the agenda.
MOTION UNANIMOUSLY APPROVED

Approval of Minutes:

2. There were no questions or comments on the February 19, 2019 minutes.
Motion made by Lawrence, seconded by Ledgeview to approve the February 19, 2019 minutes as presented.
MOTION APPROVED UNANIMOUSLY

Appearances:

3. **Presentation by Alex Puryear of Utilis on LiDAR leak detection**
Alex Puryear joined the meeting at this time via telephone and web conference. He explained the project that the Green Bay Water Utility (GBWU) is doing utilizing his company's satellite-based leak detection services. The GBWU project meets the minimum threshold for miles of water mains, so additional participants can join the GBWU project if their water mains are located in the image path. Water Authority members, MPU, and any other communities could also collaborate to create an independent project that includes at

least 500 miles of water main. The GBWU satellite image is scheduled to be taken on March 28, and they plan to take another image in 2020 for comparison. The cost for the imaging service and reporting of results is \$65 per mile of water main.

Puryear explained how the technology works. The satellite image penetrates to 12 feet below the ground surface. The Utilis algorithm identifies a spectral signature for soil that is saturated with treated water in contrast with other kinds of soil saturation. This helps to find general areas, or zones, of water system leaks as small as one-half gallon per minute that have been leaking for at least 24 to 48 hours. The zones range from 330 to 660 feet in diameter and help to narrow down the areas within a larger system where additional investigation is needed to pinpoint the leaks. It does not matter whether there is shallow bedrock – the saturation can still be detected. River crossings are a challenge. Leaks from pipes that are on a river or stream bed and leaking into the river will be diluted too quickly to detect. Pipes that are tunneled under a river will only be detectable down to the 12-foot limit. Utilis has 50 projects underway in the U.S., and the GBWU project will be their first in Wisconsin.

The Committee discussed potentially joining the GBWU project and other options for creating an independent project. Scott Thoresen stated that De Pere, Bellevue, and Manitowoc Public Utilities are currently seeking bids for leak detection under a joint solicitation. Puryear explained how the Utilis data can be used in combination with onsite services for increased efficiency in the field.

It was noted that the March 28 image path does not include Manitowoc. The planned 2020 image path will include Manitowoc and the entire length of the Water Authority's transmission main. Sparacio will provide Utilis' contact information to all the members. Alex should be contacted directly if interested in receiving a quote. In addition to the service fee, a GIS Shapefile of water main locations must be provided to Utilis.

Communications:

4. None

Agenda Items:

5. Review the cost-share method for Sensus AMI

Manager Sparacio provided an updated schedule for cost-sharing of the AMI data hosting fees. This affects only the members involved in this contract with Sensus (i.e., De Pere, Howard, Allouez, and Bellevue). The first five years of the hosting fee allocation were based on an estimated number of meters to be installed. Now the actual number of meters installed can be used for 2019 and future years. There were no concerns with the updated schedule. The AMI hosting invoice from Sensus typically comes in late March or early April, which the Authority pays and then invoices the applicable members for their respective shares.

6. Review 2018 take-or-pay charges and meter read dates

There was a question at the February meeting on the discrepancy between dates on the monthly water use reports versus the monthly bills and how this might affect take-or-pay charges for the year. Sparacio reported that he reviewed the MPU water purchase agreement and discussed this with MPU staff. The final meter reading date for 2018 was December 28 as reflected in the water use report. The agreement states that the meter is to be read for billing the Water Authority on the final business day of the month. December 31, 2018 was a holiday for MPU, so December 28 was the final business day. The take-or-pay charges were relatively small at about \$6,000. These three additional days of 2018 water use will help the Authority in its 2019 water consumption totals. There were no further questions on this topic.

7. Project status updates

a. Transmission system operation and maintenance

Sparacio stated that he has not yet had a chance to work with MPU on the preventive maintenance plan, so there is no update at this time. We will keep it on the agenda as a placeholder for future updates. Rob Michaelson stated that he is glad to work with the Authority on further developing the preventive maintenance plan. Don Voogt left the meeting at this time.

b. Green Bay Water Utility Interconnect Study

Sparacio presented updates on the potential emergency interconnection with Green Bay. Since the February Technical Committee meeting, he and Mc Mahon have further discussed the draft report with GBWU and AECOM. It has been clarified that the timeframe for potentially exceeding the hydraulic capacity of the GBWU transmission mains is much longer than initially understood. A firm capacity of 25 million gallons per day (mgd) for these 36-inch mains (as discussed at the February meeting) was an old number and was based on a scenario where one of the two water mains was shut down. Improvements have been made to these two water mains in recent years, and they regularly transmit closer to 40 mgd.

If both the Water Authority and GBWU could agree to limit themselves to average day demand in emergency situations, then the interconnection would not require any ancillary improvements to the GBWU water system for the full period of the study, which went out to 2035. While constructing the interconnection would still be very costly, this clarification warrants further exploration of the potential project. Discussion ensued regarding alternatives for supporting each other in emergency situations using combinations of wells and Lake Michigan interconnections.

Betts noted that the Water Authority Board discussed the emergency interconnection water main route. The route shown on the concept plan map is not set in stone. With further study, it is possible that the actual pipeline location could be modified to reduce the distance and construction cost.

Discussion ensued regarding potential fees for readiness to serve, potential funding sources, and the Water Authority's current debt obligations. Sparacio explained that the next steps are to obtain some additional clarifications from GBWU on the report, to begin the discussion of potential cost-sharing and readiness to serve fees, and to provide a more detailed economic analysis.

c. Utility Cooperation and Collaboration Study

Sparacio asked that the members provide their responses as soon as possible on the data request from Raftelis and thanked those who have already done that. The upcoming schedule for Steering Committee and Stakeholder meetings was discussed. The next Stakeholder Workshop (with everyone invited to see the results of the Business Case Evaluations) is tentatively scheduled for the second week in April.

d. Emergency Response Plan tabletop exercise

Michaelson stated that he is updating contact information in the Emergency Response Plan, but it is otherwise up to date. He then provided an update on the tabletop exercise. It has been scheduled for May 23rd from 8:00 a.m. to noon and will take place at the Ledgeview Community Center building. All Water Authority members are invited, and water operators are encouraged to attend. DNR staff and other key stakeholders will be invited as well.

8. Water sales report through February 28, 2019:

There were no questions or comments on the February 2019 water sales report. Rob Michaelson left the meeting at this time.

Old Business:

9. None

New Business:

10. None

Closed Session

11. Finished Water Pump Station potential projects

Sparacio noted that there is a closed session option for this item based on the discussion at the February Technical Committee meeting. Scott Thoresen stated that this topic was discussed in detail at the Water Authority Board meeting, and his concerns have been satisfied. Betts stated that his concerns had been addressed as well. There was a consensus that an additional closed session discussion is not needed at this time, so the meeting remained in open session. Sparacio will proceed with the next steps on these potential projects based on the direction he received from the Board.

Next Meeting:

12. Agenda Items for the April 9, 2019 Meeting
None identified at this time.

Adjourn:

Motion made by Howard, seconded by Lawrence to adjourn at 3:25 p.m.

MOTION UNANIMOUSLY APPROVED

Respectfully submitted,
Nic Sparacio, Manager