

Lake Village Water Association, Inc.
Case No. 2022-00325
Unaccounted-For Water Loss Reduction Plan, Surcharge and Monitoring

Commission Staff's Third Request for Information to Lake Village Water Association, Inc.

Question 1

Respondent: Mike D. Sanford

Refer to the Qualified Infrastructure Improvement Plan (QIIP) filed on January 30, 2023. Confirm whether Lake Village Water has begun any of the projects listed in the QIIP, other than the replacement of service lines along Hughley Lane and Paradise Camp Road for which Lake Village Water has already received approval to expend surcharge funds by Order issued November 28, 2023.

Response

Respondent: Mike D. Sanford

In addition to replacing service lines along Hughley Lane and Paradise Camp Road, Lake Village Water has completed the Contract 14 Distribution System Improvement Project. Lake Village Water has procured engineering services and begun project design on the Contract 15 Distribution System Improvement Project.

Question 2

For any projects listed in response to Item 1, provide the following:

- a. A detailed description of each project;
- b. The current status of each project;
- c. The total of any surcharge funds already spent on the project;
- d. The estimated amount of funds from the surcharge account needed to complete each project; and
- e. The estimated date of completion or the actual date of completion.

Response

Respondent: Mike D. Sanford

Contract 14 Distribution System Improvement Project

- a. The Contract 14 Distribution System Improvement Project replaced approximately 6 miles of aged infrastructure throughout portions of the distribution system. The project scope consisted of replacement of the water mains, Lake Village Water's portion of the

service lines for each connection, new setters, meter boxes that were in disrepair and new meters.

- b. The Contract 14 Distribution System Improvement Project is complete. Documentation of Total Project As-Built Cost, a Certified Statement from the Engineer regarding Substantial Completion and As-Built Drawings were submitted to the Public Service Commission on April 16, 2024.
- c. No surcharge funds were expended on the project. The project was funded by a USDA, Rural Development loan and Cleaner Water Program grant funds from the Kentucky Infrastructure Authority. The Public Service Commission granted a CPCN for the project on May 3, 2023.
- d. No surcharge funds were needed to complete the project.
- e. The Contract 14 Distribution Improvement Project was completed on April 16, 2024.

Contract 15 Distribution System Improvement Project

- a. The Contract 15 Distribution Improvement Project consists of the replacement of aged and inadequate water mains and service lines throughout the distribution system. Along Waterworks Road in Boyle County, approximately 18,400 LF of 4-inch water main and service lines will be replaced. In Mercer County, approximately 11,200 LF of 4-inch water main and service lines will be replaced in the Sunrise Shores and Lakeview Point areas of Herrington Lake, approximately 5,700 LF of 6-inch water main and service lines will be replaced along Dix Dam Road. Sections of the Contract 14 Distribution System Improvement Project that were removed from the project scope due to cost overruns will also be included in the project. The sections from Contract 14 will be included as Alternates to control costs. The sections from Contract 14 that will be included in the project are located in Mercer County and will include the replacement of approximately 300 LF of 4-inch HDPE water main, to include 223 LF of horizontal directional drilling, the replacement of 2,857 LF of 3-inch water main and service lines located along Wildwood Road, the replacement of 8,040 LF of 8-inch of water main and service lines located along US 127 and the replacement of 984 LF of 4-inch water and service lines located along Burgin Road. The project will aid in maintaining an acceptable percentage of non-revenue water in the future and will also address current and future growth within the distribution system.
- b. Engineering Services for the Contract 15 Distribution System Improvement Project have been procured and the project is approximately 50% designed. Funding for the project has not been finalized.
- c. No surcharge funds have been expended for the project.
- d. No surcharge funds will be expended on the project.
- e. Construction of the Contract 15 Distribution System Improvement Project is currently planned to begin in the summer of 2025.

Question 3

Refer to the QIIP, “Source of Unaccounted-for Water Loss.” Provide any information to support Lake Village Water’s assumption that service line leaks will persist until new service lines are

installed along Paradise Camp Road and Normans Camp Road. Provide how many leaks have been discovered or repaired along these two roads since the QIIP was filed.

Response

Respondent: Mike D. Sanford

Lake Village Water monitors water loss by separating the distribution system into 6 hydraulic zones to compare the volume of water purchased and sold within each zone. Within each zone, the leaks are then tracked by type and location. The leak locations are then separated into areas located within the Contract 13 scope, the Contract 14 scope, and the Contract 15 scope. These three areas encompass the largest portion of the leaks within the distribution system and are located within the two zones that contribute the most to the monthly water loss percentage. All of the service lines within the Contract 14 project scope have been replaced, all of the service lines within the Contract 15 project scope will be replaced, leaving the areas within the Contract 13 scope to be replaced. Based on the leak location data and estimated water loss associated with the leaks, if the service line leaks were not occurring within the three areas, Lake Village Water would be able to consistently report water loss below 15% each month.

Along Paradise Camp Road, which was included in the Contract 13 project scope, Lake Village Water staff have repaired 65 service lines since 2018, with 18 repairs occurring since the QIIP was filed on January 30, 2023.

Along Normans Camp Road, which was included in the Contract 13 project scope, Lake Village Water staff have repaired 36 service lines since 2018, with 8 repairs occurring since the QIIP was filed on January 30, 2023.

Question 4

Confirm whether Lake Village Water has taken action to become compliant with meter testing requirements after being found deficient in the July 19, 2023 inspection report. If not, explain why not.

Response

Respondent: Mike D. Sanford

Since 2020, Lake Village Water has been replacing meters with the intent to replace the entire distribution system by the end of 2026. At the time of the inspection, Lake Village Water was running behind, but continually replacing meters. Meters continue to be replaced daily with at least one distribution operator replacing meters. The only time meters are not being replaced is the 3-4 day period when the meters are being read each month.

Question 5

Confirm whether the meter testing results have confirmed if any meters are running slow. If so, explain what actions Lake Village Water has taken to resolve the situation.

Response

Respondent: Mike D. Sanford

Water meter usage is reviewed monthly upon download and work orders are produced to replace any meter with zero usage for the reading period. Lake Village Water staff are confident that “dead” meters are identified quickly and replaced. Lake Village Water experiences meters that stop registering flow more often than slow meters. There have been instances where low flow on the meter was under registering the water flow, but in general Lake Village Water is confident in the usage that is being billed on the meters that are in service. Accounting for every drop of water possible is a priority, therefore meter replacement is a priority, and every meter will be replaced to result in the most accurate billing possible.

Question 6

Refer to the QIIP. Provide any updates to the estimated cost and proposed schedule of the projects proposed in the QIIP.

Response

Respondent: Mike D. Sanford

The cost of material for the replacement of the service lines has increased since the QIIP was submitted on January 30, 2023. The labor cost for the service line replacement has remained the same. Lake Village Water feels that the estimated costs found in the QIIP are still accurate at this time. The number of service lines that will be replaced may have to fluctuate up or down to accommodate the amount of surcharge funds that are available for use.

The QIIP indicates that the Contract 15 Distribution System Improvement Project will be advertised for bids in September 2024 and construction completed by July 2025. Lake Village Water is planning to advertise the project for bids in the summer of 2025, with construction completion occurring in 2026. The project timeline could move faster depending on how fast funding is secured for the project and Public Service Commission approval is granted. Another important factor that affected the project schedule was the financial impact on the customer base. Water rates were adjusted through the Alternate Rate Filing process in 2022, as well as adjusted for the Contract 14 Distribution System Project in 2023. Lake Village Water continues to focus daily on water loss reduction to shift funds spent on water purchased to other aspects of the operations such as debt service coverage, minimizing the overall impact to the water rate.

Lake Village Water’s Board of Directors and Management will evaluate the QIIP at the end of 2024 to assess the progress made and also determine whether the plan will result in achievement

of the goals and objectives that have been established, including water loss reduction and implementation of a plan that best utilizes the water loss surcharge as the 24-month mark approaches on the 48-month surcharge assessment.