# COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

#### In the Matter of

Electronic Application of Bluegrass Water Utility	)	
Operating Company, LLC for Certificates of	)	Case No. 2022-00046
Convenience and Necessity for Projects at the	)	0.000 1101 2022 000 10
Persimmon Ridge Site	)	

#### Bluegrass Water's Response to Staff' Second Request for Information

The Applicant, Bluegrass Water Utility Operating Company, LLC ("Bluegrass") herewith submits its Response to the Commission Staff's Second Request for Information. A signed, notarized verification for this Response appears on the following page. The undersigned counsel is responsible for any objection noted for a particular response.

Respectfully submitted,

/s/ Kathryn A. Eckert

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# Bluegrass Water Utility Operating Company, LLC Verification

I, **Jacob Freeman**, Director of Engineering of Central States Water Resources, Inc., the manager of Applicant Bluegrass Operating Company, LLC being duly sworn, state that I prepared or supervised the preparation of the following responses to PSC's Second Request for Information, and that the matters and things set forth in the responses are true and correct to the best of my knowledge, information and belief formed after reasonable inquiry.

Jacob Freeman

STATE OF MISSOURI (COUNTY OF ST. LOUIS (COUNTY OF S

Subscribed, sworn to, and acknowledged this day of 2022, before me, a Notary Public in and before said County and State.

My Commission expires: 11.13.2022

NOTARY PUBLIC

{seal}



MERANDA K. KEUBLER My Commission Expires November 13, 2022 St. Louis County Commission #14631487

- 1. Refer to Bluegrass Water's response to Commission Staff's First Request of Information (Staff's First Request), Item 1 and the attachments thereto.
  - a. State whether the Persimmon Permit Set and the Persimmon Technical Specifications include projects other than the moving bed biofilm reactor (MBBR) project proposed in this matter.
  - b. If so, identify those portions of the Persimmon Permit Set and the Persimmon Technical Specifications that describe the MBBR project proposed in this matter and those that describe other projects.

#### Response

- a. Everything shown in the Persimmon Permit Set and the Persimmon Technical Specifications referred to is part of the MBBR project; no other projects are included.
- b. N/A

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- 2. Refer to Bluegrass Water's response to Staff's First Request, Item 9
  - a. Explain how Bluegrass Water estimated the cost of constructing the alternatives.
  - b. Provide the remaining useful life of the current Persimmon Ridge Wastewater Treatment Plant (WWTP), or the major components thereof, and the net plant in service for current Persimmon Ridge WWTP.
  - c. Provide the expected useful life of the algae wheel growth treatment system.
  - d. Explain how the operating expenses of the algae wheel growth treatment system would compare to the operating expenses of the MBBR project proposed in this matter, and explain each basis for your response, including the likely costs of maintenance and repairs for each system.

#### Response

- a. As described in the Response to 1 PSC 09, the total replacement cost was derived using a standard estimate of \$10-\$12 per gallon. The capital estimate for the alternative (an algae wheel attached growth treatment system) was based on preliminary discussions with the manufacturer who provided an estimated budget in an in-person meeting.
- b. The major components of the current Persimmon Ridge WWTP have 5-7 years of useful life remaining, based on 20-40 year useful life periods for the various components. The net plant in service for the WWTP as of 3/31/2022 is \$65,689.
- c. The algae wheel growth treatment system would be classified as Sewer Treatment Equipment and depreciated over a 20 year period, which approximates the system's expected useful life.
- d. The operational expense of the algae wheel would be almost the same as the operational expense of the MBBR. Those costs consist primarily of electrical costs, which are virtually identical between the MBBR and the algae wheel. The long-term maintenance costs

will be slightly higher for the algae wheel as there are moving parts (e.g., axle that the wheel rotates on) that will require maintenance and are not present in a MBBR. The exact amount of this additional cost is unknown as it is a new technology, and the manufacturer could not provide a clear cost related to this — but acknowledged some maintenance would be required.

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# Request

3. Refer to KY2022-00046\_BW\_0370 provided in Bluegrass Water's response to Staff's First Request, Item 18. Explain whether any additional approval is needed from the Energy and Environment Cabinet, Department of Environmental Protection for the MBBR project proposed herein.

## Response

The approval letter provided as KY2022-00046\_BW\_0370 in response to 1 PSC 18 is the only EEC/DEP/DOW approval needed.

4. Provide the distance between the Persimmon Ridge system and the closest point at which its facilities could be attached to the nearest known wastewater facilities.

#### Response

Per the Division of Water definition of an "available system" (publicly owned treatment facility within 1 mile), there are no systems to which to connect. The nearest system, which is a publicly owned system, is the "KJC CORR INSTITUTE FOR WOMEN" and is located 1.43 miles from the Persimmon Ridge facility (as the crow flies). That system handles one prison complex and does not have a significant collection system. As such, any Persimmon Ridge connection to the facility would have to be made directly at the treatment plant. Therefore, connection would likely require 3.4 miles of force main, with a new lift station being necessary at the Persimmon Ridge facility as well as another lift station en route to the Correctional Institute treatment facility.

Furthermore, that facility is currently only designed for a maximum flow of 125,000 gallonsper-day and would require a significant expansion to handle flows from the Persimmon Ridge facility.

5. Provide any information and documentation regarding availability, feasibility, and cost of connecting Persimmon Ridge system to any other wastewater treatment system.

#### Response

As discussed in the previous response, there is no facility that meets the Division of Water definition of an "available" facility. The closest facility, the Correctional Institute, would require approximately 3.4 miles of force main and associated lift stations. Furthermore, given the current capacity of that facility, it would need to be expanded to meet Persimmon Ridge volumes. Given these problems, a detailed capital / cost study was not prepared. A project of this magnitude would cost several million dollars. Kentucky Infrastructure Authority mapping shows no other more feasible options near the Persimmon Ridge facility.

6. Identify and describe any projects Bluegrass Water currently anticipates completing in the next five years for the Persimmon Ridge system, and provide the estimated cost of the projects.

### Response

Other than the project that is the subject of this Application, Bluegrass does not anticipate any additional projects which would be beyond the usual course of business over the next five (5) years at the Persimmon Ridge facility.

7. Identify all projects that Bluegrass Water has completed at the Persimmon Ridge system and the date each such project was placed in service, briefly describe the purpose of each such project, and provided the estimated and final cost of each such project.

#### Response

To date, Bluegrass has made several improvements to the facility, some of which were discussed in the rate case previously filed. It has installed remote monitoring equipment which allows operators to become immediately aware of abnormal operating conditions at the facility, thereby allowing problems to be corrected before treatment effectiveness is compromised, environmental limits are exceeded, or service to customers is interrupted. Bluegrass made repairs to a damaged baffle present in the second cell of the lagoon. It installed an additional enhanced floating aerator and associated power and control infrastructure in the first cell, which improved the facilities ability to break down nutrients and provided more mixing in the first cell which has aided in a reduction of sludge volume in the lagoon. Bluegrass also installed containment and a scale for the liquid sodium hypochlorite disinfection chemical, which allow finer calibration of disinfection dosing. This allows for consistent compliance with permitted limits and a reduction in chemical expense over time while also preventing potential spills of the sodium hypochlorite from causing damage to equipment or the environment. Finally, Bluegrass has performed various maintenance and repair activities to existing infrastructure to ensure equipment remains in good condition, operations activities are possible, and that the site can offer reliable service to customers.

To date, the improvements made by Bluegrass amount to a total of \$88,542.94.

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# Request

8. Provide an update on the status of Bluegrass Water's efforts to obtain debt financing, including when Bluegrass Water anticipates requesting approval for the same.

# Response

Bluegrass is in advanced discussions with lenders regarding the terms of financing offers.

It expects to request approval for debt financing in 2022 once those discussions have pro-

gressed.

9. State whether funding the project proposed in this matter with equity financing would affect Bluegrass Water's ability to fulfill its plan filed in Case No. 2019- 001042<sup>2</sup> to achieve a capital structure with at least 50 percent debt financing.

<sup>2</sup> See Case No. 2019-00104, Electronic Proposed Acquisition by Bluegrass Water Utility Operating Company, LLC and the Transfer of Ownership and Control of Assets by P.R. Wastewater Management, Inc., Marshall County Environmental Services, LLC, LH Treatment Company, LLC, Kingswood Development, Inc., Airview Utilities, LLC, Brocklyn Utilities, LLC, Fox Run Utilities, LLC, Brocklyn Utilities, LLC, and Lake Columbia Utilities, Inc. (filed Oct. 31, 2019), Notice and Plan Re: Capital Structure.

#### Response

It remains Bluegrass's intention to achieve a capital structure inclusive of at least 50% debt. Bluegrass is in advanced discussions with lenders at the present time. With approval of construction plans by the Commission, a final offer of financing by the lender and approval by the Commission of the financing application, Bluegrass could be in position to utilize debt funding for all or part of this project. Should Bluegrass be required to fund the project with equity financing, the asset value generated would be used to enhance Bluegrass's credit profile and management would continue the pursuit of sufficient debt to achieve the planned capital structure.