October 11, 2021

Mr. Marvin Wilson
Wilson Law Firm, PLLC
635 Trade Avenue
PO Box 460
Eddyville, KY 42038

RE: Lyon County Water District – Rate Study Information

Dear Mr. Wilson,

Per your request, I have compiled a timeline and supporting documentation to show the steps taken over the past couple of years by the Lyon County Water District (LCWD) regarding reviewing their current rate structure.

On June 21st, 2019, the Kentucky Infrastructure Authority (KIA), invited LCWD to submit a loan application for the 2020 Safe Drinking Water State Revolving Fund in the amount of $2,094,675.00. The LCWD – Water System and Storage Tank Improvements Project (KIA Loan Number F20-034, WX21143017) was eligible for funding based on information provided during the open call for projects. The LCWD accepted this invitation, and the completed loan application was submitted in August of 2019. A copy of the loan invitation and project profile are attached to this letter.

Per the requirements of SRF, LCWD advertised a request for qualifications (RFQ) on Sunday September 1st, 2019 to solicit qualified engineering firms to perform the planning, design, and construction engineering services for the above-mentioned project. A copy of this advertisement is attached to this letter.

At the September 2019 Board Meeting, LCWD asked HDR Engineering, Inc. (HDR) to provide an engineering proposal (attached) to perform a water rate study to review the district's finances and make sure rates were in alignment with required mandates and supports the objectives of the Water District.

At the October 2019 Board Meeting, LCWD reviewed submittals from the RFQ and determined that HDR was the most qualified and responsive firm to provide engineering services related to the SRF project. It was also decided that HDR provide a proposal for engineering services for the SRF project and include the rate study fee in this proposal.

4645 Village Square Drive, Suite F, Paducah, KY 42001-7448
(270) 444-9691

EXHIBIT
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At the December 2019 LCWD Board Meeting, HDR presented a revised proposal (attached) that included the rate study and engineering, planning and construction related services for the SRF project. HDR received the signed agreement to provide these services on December 13th, 2019. A copy of the agreement is attached to this letter.

On February 6th, 2020, HDR attending the KIA board meeting in Frankfort, Kentucky for their review of the loan application (F20-034). Based on the review of financial information, KIA determined that revenues would need to increase at least $220,000 or 18% annually upon approval of the PSC to support inflation and debt service for the loan. A copy of the executive summary is attached to this letter.

Shortly after the board meeting, the global COVID-19 Pandemic spread causing several meetings through the rest of 2020 to be delayed or cancelled. HDR continued work on the rate analysis not only for what was required for the SRF project but also several other necessary capital projects for the system.

LCWD currently has an extension on the project until February 2022 (letter attached) and intends to bid the project as soon as material pricing calms down and our current rate case is resolved.

On November 27, 2019 Princeton Water and Wastewater (Princeton) filed with the PSC a revised tariff sheet setting forth proposed adjustments to its existing wholesale customers included LCWD. This rate case was not resolved until June 15th, 2020. As a result of the order, Princeton was granted an approximate 6.5% increase in addition to a surcharge of $697 month for 36 months to cover legal fees for the rate case. A copy of the PSC order is attached to this letter.

During this time, several meetings were also held between the City of Kuttawa, City of Eddyville and the LCWD to discuss a proposed consortium or regionalized water district between the three entities. These discussions as well as the Princeton Rate Case were all factors in determining the best approach for a potential rate study.

LCWD submitted and the PSC subsequently approved a Purchased Water Adjustment (Case 2021-00195) to reflect the increased cost of purchased water from Princeton, Chittenden-Livingston District, and Eddyville. It was noted in the case filing that the rates approved included the increase allowed from Princeton via Case No. 2019-00444. These new rates took effect on July 1st, 2021. A copy of the case filing is attached.

LCWD currently has an open rate case (Case 2021-00391) for a rate adjustment Per KAR 5:076. This rate case will satisfy the requirements of Case No. 2019-00444 and will include a review of the utility's total financial stability and operational viability.

After you have taken time to review the data, please don't hesitate to contact me with any questions via email at mike.hansen@hdrinc.com or via my mobile at 270-564-3446.

Sincerely,
HDR Engineering, Inc.

Michael A. Hansen

Michael A. Hansen, P.E.
Water Business Group Manager

Matthew G. Bevin
Governor

KENTUCKY INFRASTRUCTURE AUTHORITY
100 Airport Road, 3rd Floor
Frankfort, Kentucky 40601
Phone (502) 573-0260
Fax (502) 696-0676
https://kia.ky.gov

Donna L. McNeil
Executive Director

Jun 21, 2019

Don Robertson, Chairman
Lyon County Water District
PO Box 489
Kuttawa, KY 42055

Re: DWSRF 2020 FY Loan Invitation (KIA# **F20-034**)

Dear Chairman,

The Kentucky Infrastructure Authority (**KIA**) invites you to submit a loan application for the 2020 Safe Drinking Water State Revolving Fund in the amount of **$2,094,675**. The ***LCWD - Water System and Storage Tank Improvements Project*** (KIA Loan Number **F20-034, WX21143017**) is eligible for funding based on information provided during the open Call for Projects. If you are interested in DWSRF funding for your project, click on the "ACCEPT THIS INVITATION" link in the invitation email by **July 22, 2019**. Once you accept the loan invitation, you will receive an email with a link to the electronic loan application and instructions. The complete loan application package must be submitted to KIA at **kia.loanapplications@ky.gov** by **August 20, 2019**.

This letter is an invitation to apply for funding but does not commit funds to your project. If you do not submit a loan application by **August 20, 2019**, your project will be bypassed for the 2020 funding cycle. If you are bypassed but still interested in KIA funding, you must reapply during the next open Call for Projects.

After a loan application is submitted to KIA, a credit analysis will be prepared and your loan request will be presented to the KIA Board. Upon Board approval, you will receive a Conditional Commitment Letter committing funding to your project for a period of twelve (12) months. The Conditional Commitment Letter is expressly contingent upon KIA's actual receipt of funds in an amount sufficient to enable KIA to fully fund the loan. All DWSRF program requirements must be met within the terms of the Conditional Commitment Letter before a loan Assistance Agreement can be executed. A fully executed loan Assistance Agreement is required before any funds are disbursed. Please note that this loan requires annual audited financial statements, a 1.1 debt coverage ratio, an administrative fee, a replacement reserve for construction projects, and must adhere to federal prevailing wage rates as well as the American Iron and Steel Act.

If you have any questions regarding the application for financing, please contact me at 502-892-3496, **donna.mcneil@ky.gov**.

Respectfully,

Donna McNeil

Donna L. McNeil
Executive Director
Kentucky Infrastructure Authority

CC: Kyle Cunningham (PEADD Water Management Coordinator)
Dixie Cayce (Applicant Contact)
KIA File

Drinking Water Project Profile

Legal Applicant:	**Lyon County Water District**		
Project Title:	**LCWD - Water System and Storage Tank Improvements Project**		
Project Number:	**WX21143017** View Map	Submitted By:	**PEADD**
Funding Status:	**Fully Funded**	Primary County:	**Lyon**
Project Status:	**Approved**	Planning Unit:	**Lyon**
Project Schedule:	**0-2 Years**	Multi-County:	**No**
E-Clearinghouse SAI:	**KY201908071080**	ECH Status:	**Approved**
Applicant Entity Type:	**Water District (KRS 74)**	ADD WMC Contact:	**Kyle Cunningham**
Date Approved (AWMPC):	**12-05-2018**		

Project Description:

The proposed "Water System and Storage Tank Improvement Project" will address several areas throughout the distribution system. These projects will help address water age, water quality, pressure issues, and maintenance. The individual projects are broken down as follows:

Lamasco Standpipe
The Lamasco glass lined standpipe needs coating on the interior to mitigate a rust problem that was observed during inspections. In addition to coating the tank, a mixing system is proposed to be installed, along with work at the exterior valve vault to install a bypass valve for better control at the tank site. HDR has completed the design of these improvements, so when awarded, this project could be put out for bid immediately.

Jack Thompson Tank
The Jack Thompson 100,000 gallon elevated storage tank needs coating on the interior and exterior per the latest inspection. As with the Lamasco project, HDR has completed the design of these improvements, so this project could be put out for bid immediately. It would be our recommendation to bid both the tank projects as one bid package.

KY 295 Interconnects
The KY 295 interconnect projects will loop lines to allow the increase of circulation of water in the area and thereby improve water quality. This will include an 8" PVC interconnect between KY 295 & KY 373, and also an 8" PVC interconnect between US 62 and KY 295. The design of these interconnects are complete as well as all easements being procured.

The KY 373 to KY 295 Loop project is a project that loops a line that dead ends at the City of Eddyville's master meter valve. The line is also the first phase in allowing the Crittenden Livingston County Water District to serve the City of Kuttawa as a backup source or possibly a primary source. In addition, the loop will allow additional water to be transmitted by the City of Eddyville to the City of Kuttawa as a backup water source.

The US 62 & KY 295 project provides another connection between the Lyon County Water District and the City of Kuttawa. Along with the KY 373 to KY 295 project described above, the project provides a means of allowing Kuttawa to receive water from the Crittenden Livingston County Water District and a higher volume feed from the City of Eddyville. The new feed will currently serve as a backup water supply for Kuttawa and could serve as Kuttawa's primary water supply in the event Kuttawa ceases operation of its water treatment plant.

Tinsley Creek Subdivision
The Tinsley Creek Subdivision was constructed approximately 50/60 years ago near Lake Barkley. The subdivision is currently served by an undersized 2" galvanized waterline. This waterline is undersized and creates pressure and water quality issues. The proposed project will replace the undersized line with an adequately sized waterline. This portion of the overall project has not been designed and HDR will provide the completed survey, design and specifications needed for construction.

KY 274 Creek Crossing
The final portion of this project is a replacement of a creek crossing near KY 274. Per water superintendent, Dixie Cayce, this line is very shallow and in danger of immediate failure. HDR will again provide construction drawings, specifications and all necessary permits for this portion of the project.

Need for Project:
Briefly describe how this project promotes public health or achieves and/or maintains compliance with the Clean Water Act or Safe Drinking Water Act:

The county is experiencing water pressure and water quality issues because of undersized and dead end lines. This project will improve water quality by upsizing lines and looping lines to keep adequate flow.

Project Alternatives:

Alternate A:

Do nothing.

Alternate B:

Do nothing.

Drinking Water Project Profile

WX21143017 - Lyon County Water District
LCWD - Water System and Storage Tank Improvements Project

Legal Applicant:

Entity Type: **Water District (KRS 74)** PSC Group ID: **24500**
Entity Name: **Lyon County Water District**
Web URL:
Office EMail: **lyoncowater@gmail.com**
Office Phone: **270-388-0271** Toll Free: Fax: **270-388-9825**

Mail Address Line 1: **PO Box 489** Phys Address Line 1:
Mail Address Line 2: Phys Address Line 2:
Mail City, State Zip: **Kuttawa, KY 42055** Phys City, State Zip:

Contact: **Billy Asher** Financial Contact: Auth Official: **Don Robertson**
Contact Title: **Superintendent** Financial Contact Title: Auth Official Title: **Chairman**
Contact EMail: **billy.asherlcwd@gmail.com** Financial Contact EMail: Auth Official EMail: **lyoncowater@gmail.com**
Contact Phone: **270-388-0271** Financial Contact Phone: Auth Official Phone: **270-388-0271**

Data Source: **Kentucky Infrastructure Authority** Date Last Modified: 08.02.2021

Project Administrator (PA) Information

Name: **Kyle Cunningham**
Title: **Infrastructure Coordinator/GIS Specialist**
Organization: **Pennyrile Add**
Address Line 1: **300 Hammond Dr**
Address Line 2:
City: **Hopkinsville** State: **KY** Zip: **42240**
Phone: **270-886-9484** Fax: **270-886-3211**

Applicant Contact (AC) Information

Name: **Dixie Cayce**
Title: **Superintendent**
Organization: **Lyon County Water District**
Address Line 1: **5464 US 62**
Address Line 2:
City: **Kuttawa** State: **KY** Zip: **42055**
Phone: **270-388-0271** Fax:

Project Engineer (PE) Information:

☒ This project requires a licensed Professional Engineer.
☒ A Professional Engineer has been procured for this project.

Project Engineer Information:

License No: **PE 25382**
PE Name: **Michael Alan Hansen**
Phone: **270-443-7600** Fax: **270-443-7800**
E-Mail: **mike.hansen@hdrinc.com**
Firm Name:
Addr Line 1: **Hdr Engineering, Inc.**
Addr Line 2: **2550 Irvin Cobb Dr**
Addr Line 3:
City: **Paducah** State: **KY** Zip: **42003**
Status: **Current** Disciplinary Actions: **NO**
Issued: **06-22-2007** Expires: **06-30-2023**

Drinking Water Project Profile

WX21143017 - Lyon County Water District

LCWD - Water System and Storage Tank Improvements Project

Estimated Budget

Project Cost Categories:

Cost Category	Cost
Administrative Expenses:	$ 50,000
Legal Expenses:	$ 15,000
Land, Appraisals, Easements:	
Relocation Expenses & Repayments:	
Planning:	
Engineering Fees - Design:	$ 50,000
Engineering Fees - Construction:	$ 31,150
Engineering Fees - Inspection:	$ 106,025
Engineering Fees - Other:	
Construction:	$ 1,675,000
Equipment:	
Miscellaneous:	
Contingencies:	$ 167,500
Total Project Cost:	**$ 2,094,675**

Construction Cost Categories:

Cost Category	Cost
Treatment:	
Transmission & Distribution:	$ 1,675,000
Source:	
Storage:	
Purchase of Systems:	
Restructuring:	
Land Acquisition:	
Non-Categorized:	
Total ConstructionCost:	**$ 1,675,000**

Total Sustainable Infrastructure Costs:

Note: Total Sustainability Infrastructure Costs are included within construction and other costs reported in this section. This breakout is provided for SRF review purposes.

Project Funding Sources:

Total Project Cost: **$2,094,675**

Total Committed Funding: **$2,094,675**

Funding Gap: **$0 (Fully Funded)**

☐ This project will be requesting SRF funding for fiscal year 2023.

Funding Source	Loan or Grant ID	Fiscal Year	Amount	Status	Applicable Date
KIA SRF Fund F Loan (DW)	F20-034	2020	$2,094,675	Committed	2/6/2020
Cleaner Water Program Grant Funds		2022	$500,000	Anticipated	
Total Committed			**$2,094,675**		

Funding Source Notes:

This project has an FY20 invite, but has not been taken to the board yet. I am resubmitting this project for FY21 in case there is an issue causing the project to not get funded from FY20.

Estimated Project Schedule:

Est. Environmental Review Submittal Date:	**03-01-2020**
Estimated Bid Date:	**11-01-2019**
Estimated Construction Start Date:	**12-01-2019**
Estimated Construction Completeion Date:	**05-01-2020**

Drinking Water Project Profile

WX21143017 - Lyon County Water District

LCWD - Water System and Storage Tank Improvements Project

The following systems are beneficiaries of this project:

✓ **KY0720933 Lyon County Water District**

Note: Check mark indicates primary system for this project.

Project Ranking by AWMPC:

Regional Ranking(s):

Planning Unit Ranking:

Total Points:

- Plans and specs have been sent to DOW.
- Plans and specs have been reviewed by DOW.
- Plans and specs have been sent to PSC.
- Plans and specs have been reviewed by PSC.

Economic, Demographic and Geographic Impacts

Economic Impacts	
Jobs Created:	
Jobs Retained:	

*Demographic Impacts (GIS Census Overlay)			
Servceable Demographic	Project Area	Included Systems	Included Utilities
Population:	32	4,039	4,036
Households:	25	2,944	2,944
MHI:	$60,101	$53,555	*$53,555
MHI MOE	$9,577	$8,598	*$8,598
MOE as Pct:	16%	16.0%	16.0%
**NSRL:		0	0

Population and household counts are based on 2010 census block values from the SF1 (100%) dataset.

MHI Source is from the American Community Survey 2015-2019 5Yr Estimates (Table B19013) *(for the primary system operated by the above listed beneficiary utilities).

MHI MOE = Med HH Income Margin of Error.

** NSRL (Non-Standard Rate Levels):
0 = Income above Kentucky MHI (KMHI).
1 = Income between 80% KMHI and KMHI.
2 = Income less than or equal to 80% KMHI.
- KMHI = $50,589
- 80% KHMI = $40,471

New Customers	
New Residential Customers:	
New Commercial Customers:	
New Institutional Customers:	
New Industrial Customers:	

New or Improved Service		
Service Demographic	Survey Based	Census Overlay*
To Unserved Households:		
To Underserved Households:	300	25
To Total Households:	300	25
** Cost Per Household:	$6,982	

* GIS Census block overlay figures are estimates of population and households potentially served by systems and projects based on a proximity analysis of relevant service lines to census block boundaries.

** Cost per household is based on surveyed household counts, not GIS overlay values.

Geographic Impacts For Project Area

Counties
Lyon

Legislative Districts	
District Name	Legislator
House 006	Chris Freeland
Senate 01	Jason Howell
Congressional 1	James Comer

Groundwater Sensitivity Zones

HUC 10 Watersheds	
HUC Code	Watershed Name
0513020507	Eddy Creek-Cumberland River
0513020508	Livingston Creek-Cumberland River

Geographic Impacts For Included System(s)

Counties
Caldwell
Crittenden
Lyon
Trigg

Legislative Districts	
District Name	Legislator
House 004	Lynn Bechler
House 005	Mary Beth Imes
House 006	Chris Freeland
Senate 01	Jason Howell
Senate 04	Robby Mills
Congressional 1	James Comer

DW Specific Impacts

- This project relates to a public health emergency.
- This project will assist a non-compliant system to achieve compliance.
- This project will assist a compliant system to meet future requirements.
- This project will provide assistance not compliance related.
- This project is necessary to achieve full or partial compliance with a court order, agreed order, or a judicial or administrative consent decree.

  Agreed Order Number:
- Primary system has not received any SDWA Notices of Violation within the previous state fiscal year-July through June, i.e. July 2014 – June 2015).

Project Inventory (Mapped Features):

Mapped Point Features

DOW Permit ID	Count	FeatureType	Purpose	Status	Existing Capacity	Proposed Capacity	Units
KY0720933	1	WATER TANK	IMPROVE WATER QUALITY	REHAB	100,000.00		GALLONS
KY0720933	1	WATER TANK	IMPROVE WATER QUALITY	REHAB	189,000.00		GALLONS
KY0720933	1	INTERCONNECT METER	METER - FINISHED WATER INTERCONNECT	REHAB			EA

Mapped Line Features

DOW Permit ID	Line Type	Purpose	Activity	Size (in.)	Material	Length (LF)
					Total Length	16,718
KY0720933	WATER LINE: FINISHED	DISTRIBUTION	EXTENSION	8.00	PVC	9,088
KY0720933	WATER LINE: FINISHED	DISTRIBUTION	REHAB - REPLACE PROBLEM LINES	6.00	PVC	199
KY0720933	WATER LINE: FINISHED	DISTRIBUTION	REHAB - REPLACE UNDERSIZED LINES	4.00	PVC	7,431

Administrative Components:

- ☑ Planning
- ☑ Design
- ☑ Construction
- ☐ Management

Regionalization Components:

Public Water Systems Eliminated:

☐ this project includes the elimination of public water system(s) through merger or acquisition.

Water Treatment Plants Eliminated:

☐ This project includes the elimination of water treatment plant(s) through interconnect(s).

Supplementation of Raw Water Supply:

☐ This project includes supplementing the existing raw water supply.

Supplementation of Potable Water Supply:

☐ This project includes supplementing the existing potable water supply.

Emergency Only Water Supply:

☐ This project provides emergency only water supply.

Water Source Protection:

☐ This project includes land acquisition for water source protection.

Water Treatment Components:

☐ This project includes water treatment components

Treatment Activities:

☐ This project includes a new water treatment plant.

☐ This project includes an expansion of an existing water treatment plant.

☐ This project includes rehabilitation of an existing water treatment plant.

☐ This project includes upgrades to an existing water treatment plant.

☐ This project includes emergency power generators for treatment activities.

☐ This project includes redundant treatment processes.

☐ This project includes replacement of raw water lines.

Treatment - Upgrades/Modifications:

☐ This project includes infrastructure options to meet Cryptosporidium removal/inactivation requirements.

☐ This project includes infrastructure options to meet CT inactivation requirements.

☐ This project includes treatment modifications to meet the Disinfectants/Disinfection Byproducts Rule at the water treatment plant.

☐ This project will provide treatment modifications for VOCs, IOCs, SOC, or Radionuclides.

☐ This project includes treatment modifications to address Secondary Contaminants.

Security:

☐ This project includes security components for water treatment facilities.

Water Distribution and Storage:

☑ This project includes water distribution and/or storage components.

Water Line Extensions:

☑ This project includes water line extension(s).

Length of extensions: **9,088 LF**

Number of new connections: **0**

Redundancy Components:

☐ This project includes emergency power generators for distribution and/or storage activities.

Number of units provided: **0**

☐ This project includes redundant distribution and/or storage processes.

Finished Water Quality:

☑ This project includes infrastructure to address inadequate water turnover and disinfection byproducts (DBPs).

Number of loops created: **2**

☐ This project includes a tank mixing system.

The project will install new lines interconnecting the system with Kuttawa and Eddyville and eliminating dead end lines.

☐ This project includes infrastructure to address inability to maintain disinfection residual.

Water Line Replacement:

☑ This project replaces problem water lines (breaks, leaks, or restrictive flows due to age, water lines consisting of lead and/or asbestos-cement (AC), and/or inadequately sized water lines.

Total length of line replacement: **7,630**

☐ This project replaces lead service lines.

Total length of lead service line replacement (LF):

Roads Serviced by Line Replacements:

Road Name	LF Serviced
State Route 274	200
Cherokee Loop	1,811
Algonquin Rd	2,412
Tinsley Creek Rd	2,698
Total LF Serviced	7,121

Water Loss in the Last 12 Months:

Water Loss Volume (MG)	40.218
Water Loss Percent (%)	30 %

Water Storage and Pressure Components:

- ☐ This project includes the construction of new water tank(s).
- ☐ This project includes the replacement of existing water tank(s).
- ☑ This project includes the rehabilitation of existing water tank(s).

  Number of rehabilitated tanks: **2**

- ☐ This project includes the construction of new pump station(s).

  Number of new pump stations: **0**

  - ☐ This project includes new pump stations for boosting pressure .
  - ☐ This project includes new pump stations for filling water tanks.

- ☐ This project includes the rehabilitation of existing pump station(s).

  Number of rehabilitated pump stations: **0**

Security:

- ☐ This project includes security components for water distribution infrastructure.

Sustainable Infrastructure - Green Infrastructure:

Green stormwater infrastructure includes a wide array of practices at multiple scales that manage wet weather and that maintains and restores natural hydrology by infiltrating, evapotranspiring and harvesting and using stormwater. On a regional scale, green infrastructure is the preservation and restoration of natural landscape features, such as forests, floodplains, and wetlands, coupled with policies such as infill and redevelopment that reduce overall imperviousness in a watershed. On the local scale, green infrastructure consists of site and neighborhood-specific practices, such as:

Component	Cost
☐ Bioretention	**$0**
☐ Trees	**$0**
☐ Green Roofs	**$0**
☐ Permeable Pavement	**$0**
☐ Cisterns	**$0**
Total Green Infrastructure Cost:	**$0**

There are no Green Infrastructure components specified for this project.

Sustainable Infrastructure - Water Efficiency:

The use of improved technologies and practices to deliver equal or better services with less water. Water efficiency encompasses conservation and reuse efforts, as well as water loss reduction and prevention, to protect water resources for the future. Examples include:

	Component	Cost
☐	Installing or retrofitting water efficient devices such as plumbing fixtures and appliances (toilets, showerheads, urinals).	$0
☐	Installing any type of water meter in previously unmetered areas (can include backflow prevention if in conjunction with meter replacement).	$0
☐	Replacing existing broken/malfunctioning water meters with AMR or smart meters, meters with leak detection, backflow prevention.	$0
☐	Retrofitting/adding AMR capabilities or leak equipment to existing meters.	$0
☐	Conducting water utility audits, leak detection studies, and water use efficiency baseline studies, which are reasonably expected to result in a capital project or in a reduction in demand to alleviate the need for additional capital investment.	$0
☐	Developing conservation plans/programs reasonable expected to result in a water conserving capital project or in a reduction in demand to alleviate the need for capital investment.	$0
☐	Recycling and water reuse projects that replace potable sources with non-potable sources (Gray water, condensate, and wastewater effluent reuse systems, extra treatment or distribution costs associated with water reuse).	$0
☐	Retrofit or replacement of existing landscape irrigation systems to more efficient landscape irrigation systems.	$0
☐	Water meter replacement with traditional water meters.*	$0
☐	Distribution pipe replacement or rehabilitation to reduce water loss and prevent water main breaks.*	$0
☐	Storage tank replacement/rehabilitation to reduce water loss.*	$0
☐	New water efficient landscape irrigation system, where there currently is not one.*	$0
	Total Water Efficiency Cost:	$0

** Indicates a business case may be required for this item.*

There are no Water Efficiency components specified for this project.

Sustainable Infrastructure - Energy Efficiency:

Energy efficiency is the use of improved technologies and practices to reduce the energy consumption of water projects, use energy in a more efficient way, and/or produce/utilize renewable energy. Examples include:

	Component	Cost
☐	Renewable energy projects, which are part of a public health project, such as wind, solar, geothermal, and micro-hydroelectric that provides power to a utility.	$0
☐	Utility-owned or publicly-owned renewable energy projects.	$0
☐	Utility energy management planning, including energy assessments, energy audits, optimization studies, and sub-metering of individual processes to determine high energy use areas.	$0
☐	Energy efficient retrofits, upgrades, or new pumping systems and treatment processes (including variable frequency drives (VFDs).*	$0
☐	Pump refurbishment to optimize pump efficiency.*	$0
☐	Projects that result from an energy efficient related assessment.*	$0
☐	Projects that cost effectively eliminate pumps or pumping stations.*	$0
☐	Projects that achieve the remaining increments of energy efficiency in a system that is already very efficient.*	$0
☐	Upgrade of lighting to energy efficient sources.*	$0
☐	Automated and remote control systems (SCADA) that achieve substantial energy savings.*	$0
	Total Energy Efficiency Cost:	$0

** Indicates a business case may be required for this item.*

There are no Energy Efficiency components specified for this project.

Sustainable Infrastructure - Environmentally Innovative:

Environmentally innovative projects include those that demonstrate new and/or innovative approaches to delivering services or managing water resources in a more sustainable way. Examples include:

	Component	Cost
☐	Total integrated water resources management planning, or other planning framework where project life cycle costs are minimized, which enables communities to adopt more efficient and cost-effective infrastructure solutions.	$0
☐	Plans to improve water quantity and quality associated with water system technical, financial, and managerial capacity.	$0
☐	Source water protection planning (delineation, monitoring, modeling).	$0
☐	Planning activities to prepare for adaptation to the long-term effects of climate change and/or extreme weather.	$0
☐	Utility sustainability plan consistent with EPA's sustainability policy.	$0
☐	Greenhouse gas inventory or mitigation plan and submission of a GHG inventory to a registry as long as it is being done for an SRF eligible facility.	$0
☐	Construction of US Building Council LEED certified buildings, or renovation of an existing building.	$0
☐	Projects that significantly reduce or eliminate the use of chemicals in water treatment.*	$0
☐	Treatment technologies or approaches that significantly reduce the volume of residuals, minimize the generation of residuals, or lower the amount of chemicals in the residuals.*	$0
☐	Trenchless or low impact construction technology.*	$0
☐	Using recycled materials or re-using materials on-site.*	$0
☐	Educational activities and demonstration projects for water or energy efficiency (such as rain gardens).*	$0
☐	Projects that achieve the goals/objectives of utility asset management plans.*	$0
	Total Environmentally Innovative Cost:	$0

** Indicates a business case may be required for this item.*

There are no Environmentally Innovative components specified for this project.

Sustainable Infrastructure - Asset Management:

If a category is selected, the applicant must provide proof to substantiate claims. The documents must be submitted to Anshu Singh (Anshu.Singh@ky.gov) for CW projects

Component

Last Rate Adjustment Date: **01-07-2016** Download Fee Schedule

Rate Adjustment Age: **72 months**

System's monthly water bill, based on 4,000 gallons, as a percentage of MHI: **1.04%**

☐ The system(s) has an Asset Management Plan (AMP).

☐ The system(s) involved in this project have specifically allocated funds for the rehabilitation and replacement of aging and deteriorating infrastructure.

Project Status: Approved Date Approved: 12-05-2018 Date Revised:

Wall Cracks, Water & Basement, Crawl Spaces, Mold, Moisture and Mildew Removal
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Joe's Home Improvements
New homes, additions, remodels. Licensed Insured
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American Heart Association.
A stroke can change your life forever

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LITTLE'S TREE & STUMP REMOVAL
Hedge Trimming
Aerial Bucket Truck
FULLY INSURED
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0515 COMPUTER

Spectrum Triple Play! TV, Internet & Voice for $99.97/mo. Fastest Internet. 100 MB per second speed. Free Primetime on Demand. Unlimited Voice. NO CONTRACTS. Call 1-844-359-2853 or visit http://triple-playtoday.com/ky

Viasat Satellite Internet. Up to 12 Mbps Plans Starting at $30/month. Our Fastest Speeds (up to 50 Mbps) & Unlimited Data Plans Start at $100/month. Call Viasat today! 1-866-654-6129

0518 ELECTRONICS

DIRECTV NOW. No Satellite Needed. $40/month. 65 Channels. Stream Breaking News, Live Events, Sports & On Demand Titles. No Annual Contract. No Commitment. CALL 1-833-743-7168

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DISH TV $59.99 For 190 Channels $14.95 High Speed Internet. Free Installation, Smart HD DVR Included, Free Voice Remote. Some restrictions apply. Call 1-855-633-4574

DISH TV - $59.99/month for 190 channels $100 Gift Card with Qualifying Service! Free premium channels (Showtime, Starz, & more) for 3 months. Voice remote included. Restrictions apply, call for details. Call 1-855-303-4767

Get DIRECT TV! ONLY $35/month! 155 Channels & 1000s of Shows/Movies on Demand (w/SELECT All Included Package) PLUS Stream on Up to FIVE Screens Simultaneously at No Addt'l Cost. Call 1-866-292-5435 or satellitedealnow.com/KPA

Put on your TV Ears and hear TV

0955 LEGALS

Public Notice
2019-2020 Proposed Tax Rate
Public Hearing

The Board of Commissioners of the City of Paducah will hold a public hearing on September 9, 2019 at 5:30 pm CST at Paducah City Hall for the purpose of obtaining comments from the public regarding the proposed 2019-2020 property tax rates.

	City		PJC	
	Tax Levy	Revenues	Tax Levy	Revenues
Tax Year 2019-2020	$.267	$5,052,000	$.016	$303,000
Tax Year 2018-2019	$.261	$4,806,000	$.016	$295,000
Compensating Rate	$.257	$4,863,000	$.016	$303,000
New Real Property		$67,000		$4,000
Personal Property		$613,000		$25,000

Revenues received in excess of last year's revenue will be used for City public safety and public service expenditures and for community college capital projects and educational program expenditures.

The Kentucky General Assembly requires that the City of Paducah publish this notice with the above information contained herein.

Lindsay R. Parrish, City Clerk

0563 MISC. ITEMS FOR SALE

THIS NEWSPAPER COULD BE YOURS EVERY DAY!
What better gift to give yourself or a friend.
Call The Paducah Sun Customer Service Dept for details. 575-8800 or 1-800-599-1771.

REAL ESTATE FOR RENT

0605 REAL ESTATE FOR RENT

EQUAL HOUSING OPPORTUNITY
HUD PUBLISHER'S NOTICE
All real estate advertised herein is subject to the Federal Fair Housing Act which makes it illegal to advertise any preference, limitations, or discrimination based on race, color, religion, sex, handicap, familial status or national origin, or intention to make any such preferences, limitations or discrimination. State laws forbid discrimination in the sale, rental or advertising of real estate based on factors in addition to those protected under federal law. We will not knowingly accept any advertising for real estate which is in violation of the law. All persons are hereby informed that all dwellings advertised are available on an equal opportunity basis.

REAL ESTATE FOR SALE

0710 HOMES FOR SALE

SEEING is believing! Don't buy property based on pictures or representations. For free information about avoiding timeshare and real estate scams, write the Federal Trade Commission at Washington, DC 20580 or call the National Fraud Information Center. 1-800-876-7060

TRANSPORTATION

0864 PICKUP TRUCKS FOR SALE

2011 Ford Ranger w/ 30 thousand miles Michelin Tires, Step Boards, Premium Bed Cover, Auto Transmission. Garage Kept. 270-554-0928

0868 CARS FOR SALE

2003 ENVY SLE 4 wheel drive, good condition. Asking $3950

1997 Dodge Dakota Sport, good condition. Asking $2500

8N Tractor, looks and runs good. Asking $2750

270-210-2870
270-853-4108

AUTOMOVER SPECIAL
6 lines - 14 days
only **$25.00**
call 270-575-8700

FINANCIAL

0910 BUSINESS OPPORTUNITIES

0710 HOMES FOR SALE

Court Ordered AUCTION
Wednesday, September 4th at 5:30 PM
Location: 2 Sunset Court, La Center, KY, 42056
3 Bedroom, 2 Bath Brick Home

Property Features:
• 1788 sq. ft. of living area per PVA • 288 sq. ft. attached carport per PVA • Master bedroom with full bath • 2 addition bedrooms • Additional full bath • Large family room • Kitchen • Dining room • Central heat and air (currently off) • Updated windows • Hardwood, carpet and vinyl flooring throughout • Appliances included

OPEN HOUSE - Wed. Aug. 28th - 3:30-5:30 PM
ALSO HOUSEHOLD FURNITURE SELLING IN LARGE LOTS
For more information and pictures go to kurtzauction.com or call Joseph M. Mills, auctioneer

Terms: Real estate - 10% down at the auction balance due within ten (10) days of court approval. Personal property: Paid in full at the auction by cash or check
Owner: Beneficiaries of the Mary Allen Estate
c/o Steven S. Crone, Atty for defendants
c/o John Bennett, Atty for Plaintiff

800-264-1204
kurtzauction.com
kurtz AUCTION & REALTY
Announcements made the day of sale take precedence over printed matter

LEGALS

0955 LEGALS

Applying for Social Security Disability or Appealing a Denied Claim? Call Bill Gordon & Assoc. Social Security Disability Attorneys. 1-888-965-8450 FREE Consultations. Local Attorneys Nationwide [Mail: 2420 N St NW, Washington DC. Office Broward Co (TX/NM Bar)]

LUNG CANCER? And Age 60+? You

0955 LEGALS

Premier Storage
3250 Key Dr
Paducah, Ky
42003
270-415-9472

Mini-Storage Units Auction. Premier Storage will conduct a public auction September 5 @ 4:00 P.M. Personal property stored in the following units will be sold on site to satisfy owner's lien. Bethany Farris, unit 153; Mika Kitrel, unit103; Donnie Rushing, unit 120; Monica Benenfield, unit

0955 LEGALS

REQUEST FOR QUALIFICATIONS

The Lyon County Water District (LCWD), Kuttawa, Kentucky, will retain a qualified engineering firm to provide planning, design, construction, and other required services for the Water System and Storage Tank Improvements Project. Funding sources for the project may include, but are not limited to, a KY Infrastructure Authority (KIA) Drinking Water State Revolving Fund Loan (DWSRF), and local funds. The LCWD will accept Statements of Qualifications (SOQs) from interested firms until 3:00 p.m. on September 27th, 2019. A packet containing information about the project and criteria which will be used to select the most qualified firm may be obtained by contacting Ryan Martin at 270-388-0271. SOQs will be submitted to: Don Robertson, Chairman, Lyon County Water District, PO Box 489, Kuttawa, KY 42055. The LCWD reserves the right to reject any and all submittals, to waive any technicalities, and to negotiate with the respondent that best meets the project requirements. The LCWD is not responsible or liable for any cost incurred by firms responding to this solicitation.

This solicitation for SOQs is being conducted to fulfill state/federal funding agency procurement requirements. The LCWD will adhere to the requirements as they pertain to conditions of employment, to be observed under the contract. Section 3 of Section 109 of the Housing and Community Development Act of 1974, Title VI of the Civil Rights Act of 1964, Executive Order 11246, Rehabilitation Act of 1973, Section 504 Handicapped and Age Discrimination Act of 1975 and the Anti-Kickback Act.

No person shall be excluded from participation in, denied benefits of or subject to discrimination in the implementation of this project on the grounds of race, color, national origin, sex or age. The LCWD is an Equal Opportunity Employer.

Don Robertson, Chairman

0107 SPECIAL NOTICE

The Paducah Sun
Now available **Classified Specialist**
Taking calls starting at 7:30 am
Monday-Friday
Call Jodi at 270-575-8705
Walk-Ins Starting at 8 am-3 pm

COOPERATIVE MINISTRY PADUCAH
Love which shows itself in action.
402 Legion Drive
442-6795

0955 LEGALS

REQUIRED HEARING NOTICE FOR TAX RATE EXCEEDING COMPENSATING RATE

PUBLIC NOTICE
2019 PROPOSED TAX RATE
PUBLIC HEARING

The McCracken County Fiscal Court will hold a public hearing on September 9, 2019, at 5:00 p.m., at the McCracken County Courthouse for the purpose of obtaining comments from the public regarding the proposed tax rate.

The tax rate levied last year was .096 and produced revenues in the amount of $4,148,298.00. This year's compensating rate is .098 and will produce revenues in the amount of $4,133,355.00. The McCracken County Fiscal Court proposes a tax rate of .1010 which will produce a total of $4,259,887.00 in revenues.

Revenue expected from New Property is $67,544.00; revenue expected from Personal Property is $933,089.00; revenue expected from Motor Vehicle is $621,058.00; and revenue expected from Watercraft is $18,819.00.

Revenue received in excess of last year's revenue will be used for funding of pension expense.

The Kentucky General Assembly requires that the McCracken County Fiscal Court publish this notice with the above information contained herein.

Pick up the phone and you lift the whole community.
1-800-SAL-ARMY
NEED KNOWS NO SEASON

SUDOKU

Sudoku is a number placing puzzle based on a 9x9 grid with several given numbers. The object is to place the numbers 1 to 9 in the empty squares so that each row, each column and each 3x3 box contains the same number only once. The difficulty level of the Conceptis Sudoku increases from Monday to Sunday.

Conceptis SudoKu By Dave Green

October 7, 2019

Mr. Don Robertson
Chairman
Lyon County Water District
5464 US 62
Kuttawa, KY 42005

RE: Water Rate Study

Dear Mr. Robertson,

HDR appreciates the opportunity to provide the Lyon County Water District with this proposal for a Water Rate Study. This proposal outlines a scope and fee to provide an updated study to the Lyon County Water District. Please find below a scope of services for your consideration.

1. Project Objectives:

The Lyon County Water District Rate Study, will address the following objectives:

- User fees and charges are sufficient enough to meet the District's needs and reflect the true cost of service.
- Determine the Water District's cash needs and rates for services for operations, maintenance, replacement, capital projects and existing and future debt service.
- Maintain rates that align with required mandates and supports the objectives of the Water District.
- Determine what percent of funds should be allocated for day-to-day operations versus rehabilitation and or replacement of facilities.
- Develop a methodology to recover the costs from customers for system development.
- Review Wholesale Contracts that the Water District currently holds for purchasing water.

4645 Village Square Drive, Suite F, Paducah, KY 42001-7448
(270) 444-9691

2. **Project Approach:**

- Perform a system analysis to determine the Water District's cash needs and rates for services and operations, maintenance, replacement and capital projects and debt service.
- Define a rate structure to recover the costs from customers for system development.
- Benchmark Lyon County rates to other similar water districts and municipalities.
- Provide preliminary and final reports that include recommendations for rate changes and/or methodology modifications.
- Present findings to the Water District.

HDR will perform the scope of work detailed and provided herein for a Lump Sum fee of **$9,000**

We appreciate the opportunity to provide the Lyon County Water District with this proposal for engineering services. Given timely notice to proceed, we can begin immediately. If you should have questions, please do not hesitate to call.

Sincerely,
HDR Engineering, Inc.

Michael A. Hansen, P.E.
Project Manager

Ben R. Edelen, P.E., P.L.S.
Sr. Vice President/Area Manager

December 8, 2019

Mr. Don Robertson
Chairman
Lyon County Water District
5464 US 62
Kuttawa, KY 42005

RE: KIA System Improvements

Dear Mr. Robertson,

HDR appreciates the opportunity to provide the Lyon County Water District with this proposal for engineering design, bidding, construction administration, and inspection services. In addition, we have included a fee to perform a Water & Sewer Rate Study. Please find below a scope of services for your consideration.

Task 1 - Water and Sewer Rate Study:

The Lyon County Water District Rate Study, will address the following objectives:

- User fees and charges are sufficient enough to meet the District's needs and reflect the true cost of service.
- Determine the Water District's cash needs and rates for services for operations, maintenance, replacement, capital projects and existing and future debt service.
- Maintain rates that align with required mandates and supports the objectives of the Water District.
- Determine what percent of funds should be allocated for day-to-day operations versus rehabilitation and or replacement of facilities.
- Develop a methodology to recover the costs from customers for system development.
- Review Wholesale Contracts that the Water District currently holds for purchasing water.

4645 Village Square Drive, Suite F, Paducah, KY 42001-7448
(270) 444-9691

Task 1 Approach:

- Perform a complete system analysis to determine the Water District's cash needs and rates for services and operations, maintenance, replacement and capital projects and debt service.
- Define a rate structure to recover the costs from customers for system development.
- Benchmark Lyon County rates to other similar water districts and municipalities.
- Provide preliminary and final reports that include recommendations for rate changes and/or methodology modifications.
- Present findings to the Water District.

HDR will perform the scope of work detailed for Task 1 for a Lump Sum fee of **$9,000**

Task 2 – Tank Improvements

Lamasco Standpipe

The Lamasco glass lined standpipe needs coating on the interior to mitigate a rust problem that was observed during inspections. In addition to coating the tank, a mixing system is proposed to be installed, along with work at the exterior valve vault to install a bypass valve for better control at the tank site. HDR has completed the design of these improvements, only bidding, construction administration, and inspection services will be required for this portion of Task 2.

Jack Thompson Tank

The Jack Thompson 100,000 gallon elevated storage tank needs coating on the interior and exterior per the latest inspection. As with the Lamasco project, HDR has completed the design of these improvements, so this project can be put out for bid immediately.

It would be our recommendation to bid both the tank projects as one bid package.

HDR will perform the scope of work detailed for Task 2 for a Lump Sum fee as broken down in the following way:

Bidding = $3,375
Construction Administration = $6,750
Inspection Services = $26,400

Task 3 – Tinsley Creek Subdivision

The Tinsley Creek Subdivision was constructed approximately 50/60 years ago near Lake Barkley. The subdivision is currently served by an undersized 2" galvanized waterline. This waterline is undersized and creates pressure and water quality issues. The proposed project will replace the undersized line with an adequately sized waterline. This portion of the overall project has not been designed and HDR will provide the completed survey, design and specifications needed for construction. In addition, HDR will provide bidding, construction administration and inspection services needed.

HDR will perform the scope of work detailed for Task 3 for a Lump Sum fee as broken down in the following way:

Design = $36,050
Bidding = $5,150
Construction Administration = $10,300
Inspection Services = $37,000

Task 4 – Interconnects

The KY 295 interconnect projects will loop lines to allow the increase of circulation of water in the area and thereby improve water quality. This will include an 8" PVC interconnect between KY 295 & KY 373, and also an 8" PVC interconnect between US 62 and KY 295. The design of these interconnects are complete as well as all easements being procured.

The KY 373 to KY 295 Loop project is a project that loops a line that dead ends at the City of Eddyville's master meter valve. The line is also the first phase in allowing the Crittenden Livingston County Water District to serve the City of Kuttawa as a backup source or possibly a primary source. In addition the loop will allow additional water to be transmitted by the City of Eddyville to the City of Kuttawa as a backup water source.

The US 62 & KY 295 project provides another connection between the Lyon County Water District and the City of Kuttawa. Along with the KY 373 to KY 295 project described above, the project provides a means of allowing Kuttawa to receive water from the Crittenden Livingston County Water District and a higher volume feed from the City of Eddyville. The new feed will currently serve as a backup water supply for Kuttawa and could serve as Kuttawa's primary water supply in the event Kuttawa ceases operation of its water treatment plant.

These projects are part of an overall discussion regarding the proposed Lyon County consortium project. These projects primarily benefit the City of Kuttawa and Eddyville. Financial contribution from both municipalities would be expected to complete the project.

HDR will perform the scope of work detailed for Task 4 for a Lump Sum fee as broken down in the following way:

Bidding = $5,838
Construction Administration = $11,676
Inspection Services = $40,800

Task 5 – KY 274 Creek Crossing

The final portion of this project is a replacement of a creek crossing near KY 274. Per water superintendent, Dixie Cayce, this line is very shallow and in danger of immediate failure. HDR will again provide construction drawings, specifications and all necessary permits for this portion of the project. In addition to the design, HDR will provide bidding, construction administration, and construction inspection services for this proposed project.

HDR will perform the scope of work detailed for Task 5 for a Lump Sum fee as broken down in the following way:

Design = $6,860
Bidding = $980
Construction Administration = $1,960
Inspection Services = $9,100

The following table represents the fee breakdown by task:

Task Number	Design	Bidding	Construction Administration	Inspection Services	Total Fee
1 – Water and Sewer Rate Study	$9,000				**$9,000**
2 – Tank Improvements		$3,375	$6,750	$26,400	**$36,525**
3 – Tinsley Creek Subdivision	$36,050	$5,151	$10,300	$37,000	**$88,501**
4 – Interconnects		$5,838	$11,676	$40,800	**$58,314**
5 – KY 274 Creek Crossing	$6,860	$980	$1,960	$9,100	**$18,900**

Please note that our fees do not include and geotechnical services, environmental permits beyond a standard nationwide permit, or easement procurement. It is not anticipated that these services will be required for this project, but can be quoted upon request. In addition, it is assumed that the PADD office will provide all environmental documentation required by DOW and KIA.

We appreciate the opportunity to provide the Lyon County Water District with this proposal for engineering services. Given timely notice to proceed, we can begin immediately. If you should have questions, please do not hesitate to call.

Sincerely,
HDR Engineering, Inc.

Michael A. Hansen, P.E.
Project Manager

Ben R. Edelen, P.E., P.L.S.
Sr. Vice President/Area Manager

SHORT FORM AGREEMENT BETWEEN OWNER AND HDR ENGINEERING, INC. FOR PROFESSIONAL SERVICES

THIS AGREEMENT is made as of this 13th day of December, 2019, between **LYON COUNTY WATER DISTRICT** ("OWNER"), with offices at 5464 US 62, Kuttawa, KY 42005, and HDR ENGINEERING, INC., ("ENGINEER" or "CONSULTANT") for services in connection with the project known as **KIA SYSTEM IMPROVEMENTS** ("Project");

WHEREAS, OWNER desires to engage ENGINEER to provide professional engineering, consulting and related services ("Services") in connection with the Project; and

WHEREAS, ENGINEER desires to render these Services as described in SECTION I, Scope of Services.

NOW, THEREFORE, OWNER and ENGINEER in consideration of the mutual covenants contained herein, agree as follows:

SECTION I. SCOPE OF SERVICES

ENGINEER will provide Services for the Project, which consist of the Scope of Services as outlined on the attached Exhibit A.

SECTION II. TERMS AND CONDITIONS OF ENGINEERING SERVICES

The HDR Engineering, Inc. Terms and Conditions, which are attached hereto in Exhibit B, are incorporated into this Agreement by this reference as if fully set forth herein.

SECTION III. RESPONSIBILITIES OF OWNER

The OWNER shall provide the information set forth in paragraph 6 of the attached "HDR Engineering, Inc. Terms and Conditions for Professional Services."

SECTION IV. COMPENSATION

Compensation for ENGINEER'S services under this Agreement shall be on a Lump Sum basis. The amount of the lump sum is **Two Hundred Eleven Thousand Two Hundred Forty Dollars ($211,240)**.

Task Number	Design	Bidding	Construction Administration	Inspection Services	Total Fee *
1 - Water and Sewer Rate Study	$9,000				**$9,000**
2 – Tank Improvements		$3,375	$6,750	$26,400	**$36,525**
3 – Tinsley Creek Subdivision	$36,050	$5,151	$10,300	$37,000	**$88,501**
4 – Interconnects		$5,838	$11,676	$40,800	**$58,314**
5 – KY 274 Creek Crossing	$6,860	$980	$1,960	$9,100	**$18,900**

* Please note that our fees do not include and geotechnical services, environmental permits beyond a standard nationwide permit, or easement procurement. It is not anticipated that these services will be required for this project, but can be quoted upon request. In addition, it is assumed that the PADD office will provide all environmental documentation required by DOW and KIA.

SECTION V. PERIOD OF SERVICE

Upon receipt of written authorization to proceed, ENGINEER shall perform the services described in Exhibit A within a reasonable period of time.

Unless otherwise stated in this Agreement, the rates of compensation for ENGINEER'S services have been agreed to in anticipation of the orderly and continuous progress of the project through completion. If any specified dates for the completion of ENGINEER'S services are exceeded through no fault of the ENGINEER, the time for performance of those services shall be automatically extended for a period which may be reasonably required for their completion and all rates, measures and amounts of ENGINEER'S compensation shall be equitably adjusted.

SECTION VI. SPECIAL PROVISIONS

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first written above.

LYON COUNTY WATER DISTRICT
"OWNER"

BY: Don Robertson

NAME: Don Robertson

TITLE: Chairman

ADDRESS: 5464 US 62
Kuttawa, KY 42005

HDR ENGINEERING, INC.
"ENGINEER"

BY: Ben R Edelen

NAME: Ben R. Edelen, PE, PLS

TITLE: Sr. Vice President/Area Mgr

ADDRESS: 2517 Sir Barton Way
Lexington, KY 40509

EXHIBIT A

SCOPE OF SERVICES

December 8, 2019

Mr. Don Robertson
Chairman
Lyon County Water District
5464 US 62
Kuttawa, KY 42005

RE: KIA System Improvements

Dear Mr. Robertson,

HDR appreciates the opportunity to provide the Lyon County Water District with this proposal for engineering design, bidding, construction administration, and inspection services. In addition, we have included a fee to perform a Water & Sewer Rate Study. Please find below a scope of services for your consideration.

Task 1 - Water and Sewer Rate Study:

The Lyon County Water District Rate Study, will address the following objectives:

- User fees and charges are sufficient enough to meet the District's needs and reflect the true cost of service.
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- Determine what percent of funds should be allocated for day-to-day operations versus rehabilitation and or replacement of facilities.
- Develop a methodology to recover the costs from customers for system development.
- Review Wholesale Contracts that the Water District currently holds for purchasing water.

hdrinc.com

4645 Village Square Drive, Suite F, Paducah, KY 42001-7448
(270) 444-9691

Task 1 Approach:

- Perform a complete system analysis to determine the Water District's cash needs and rates for services and operations, maintenance, replacement and capital projects and debt service.
- Define a rate structure to recover the costs from customers for system development.
- Benchmark Lyon County rates to other similar water districts and municipalities.
- Provide preliminary and final reports that include recommendations for rate changes and/or methodology modifications.
- Present findings to the Water District.

HDR will perform the scope of work detailed for Task 1 for a Lump Sum fee of **$9,000**

Task 2 – Tank Improvements

Lamasco Standpipe

The Lamasco glass lined standpipe needs coating on the interior to mitigate a rust problem that was observed during inspections. In addition to coating the tank, a mixing system is proposed to be installed, along with work at the exterior valve vault to install a bypass valve for better control at the tank site. HDR has completed the design of these improvements, only bidding, construction administration, and inspection services will be required for this portion of Task 2.

Jack Thompson Tank

The Jack Thompson 100,000 gallon elevated storage tank needs coating on the interior and exterior per the latest inspection. As with the Lamasco project, HDR has completed the design of these improvements, so this project can be put out for bid immediately.

It would be our recommendation to bid both the tank projects as one bid package.

HDR will perform the scope of work detailed for Task 2 for a Lump Sum fee as broken down in the following way:

Bidding = $3,375
Construction Administration = $6,750
Inspection Services = $26,400

Task 3 – Tinsley Creek Subdivision

The Tinsley Creek Subdivision was constructed approximately 50/60 years ago near Lake Barkley. The subdivision is currently served by an undersized 2" galvanized waterline. This waterline is undersized and creates pressure and water quality issues. The proposed project will replace the undersized line with an adequately sized waterline. This portion of the overall project has not been designed and HDR will provide the completed survey, design and specifications needed for construction. In addition, HDR will provide bidding, construction administration and inspection services needed.

HDR will perform the scope of work detailed for Task 3 for a Lump Sum fee as broken down in the following way:

Design = $36,050
Bidding = $5,150
Construction Administration = $10,300
Inspection Services = $37,000

Task 4 – Interconnects

The KY 295 interconnect projects will loop lines to allow the increase of circulation of water in the area and thereby improve water quality. This will include an 8" PVC interconnect between KY 295 & KY 373, and also an 8" PVC interconnect between US 62 and KY 295. The design of these interconnects are complete as well as all easements being procured.

The KY 373 to KY 295 Loop project is a project that loops a line that dead ends at the City of Eddyville's master meter valve. The line is also the first phase in allowing the Crittenden Livingston County Water District to serve the City of Kuttawa as a backup source or possibly a primary source. In addition the loop will allow additional water to be transmitted by the City of Eddyville to the City of Kuttawa as a backup water source.

The US 62 & KY 295 project provides another connection between the Lyon County Water District and the City of Kuttawa. Along with the KY 373 to KY 295 project described above, the project provides a means of allowing Kuttawa to receive water from the Crittenden Livingston County Water District and a higher volume feed from the City of Eddyville. The new feed will currently serve as a backup water supply for Kuttawa and could serve as Kuttawa's primary water supply in the event Kuttawa ceases operation of its water treatment plant.

These projects are part of an overall discussion regarding the proposed Lyon County consortium project. These projects primarily benefit the City of Kuttawa and Eddyville. Financial contribution from both municipalities would be expected to complete the project.

HDR will perform the scope of work detailed for Task 4 for a Lump Sum fee as broken down in the following way:

Bidding = $5,838
Construction Administration = $11,676
Inspection Services = $40,800

Task 5 – KY 274 Creek Crossing

The final portion of this project is a replacement of a creek crossing near KY 274. Per water superintendent, Dixie Cayce, this line is very shallow and in danger of immediate failure. HDR will again provide construction drawings, specifications and all necessary permits for this portion of the project. In addition to the design, HDR will provide bidding, construction administration, and construction inspection services for this proposed project.

HDR will perform the scope of work detailed for Task 5 for a Lump Sum fee as broken down in the following way:

Design = $6,860
Bidding = $980
Construction Administration = $1,960
Inspection Services = $9,100

The following table represents the fee breakdown by task:

Task Number	Design	Bidding	Construction Administration	Inspection Services	Total Fee
1 – Water and Sewer Rate Study	$9,000				**$9,000**
2 – Tank Improvements		$3,375	$6,750	$26,400	**$36,525**
3 – Tinsley Creek Subdivision	$36,050	$5,151	$10,300	$37,000	**$88,501**
4 – Interconnects		$5,838	$11,676	$40,800	**$58,314**
5 – KY 274 Creek Crossing	$6,860	$980	$1,960	$9,100	**$18,900**

Please note that our fees do not include and geotechnical services, environmental permits beyond a standard nationwide permit, or easement procurement. It is not anticipated that these services will be required for this project, but can be quoted upon request. In addition, it is assumed that the PADD office will provide all environmental documentation required by DOW and KIA.

We appreciate the opportunity to provide the Lyon County Water District with this proposal for engineering services. Given timely notice to proceed, we can begin immediately. If you should have questions, please do not hesitate to call.

Sincerely,
HDR Engineering, Inc.

Michael A. Hansen, P.E.
Project Manager

Ben R. Edelen, P.E., P.L.S.
Sr. Vice President/Area Manager

EXHIBIT B

TERMS AND CONDITIONS

HDR Engineering, Inc. Terms and Conditions for Professional Services

1. **STANDARD OF PERFORMANCE**
The standard of care for all professional engineering, consulting and related services performed or furnished by ENGINEER and its employees under this Agreement will be the care and skill ordinarily used by members of ENGINEER's profession practicing under the same or similar circumstances at the same time and in the same locality. ENGINEER makes no warranties, express or implied, under this Agreement or otherwise, in connection with ENGINEER's services.

2. **INSURANCE/INDEMNITY**
ENGINEER agrees to procure and maintain, at its expense, Workers' Compensation insurance as required by statute; Employer's Liability of $250,000; Automobile Liability insurance of $1,000,000 combined single limit for bodily injury and property damage covering all vehicles, including hired vehicles, owned and non-owned vehicles; Commercial General Liability insurance of $1,000,000 combined single limit for personal injury and property damage; and Professional Liability insurance of $1,000,000 per claim for protection against claims arising out of the performance of services under this Agreement caused by negligent acts, errors, or omissions for which ENGINEER is legally liable. If flying an Unmanned Aerial System (UAS or drone), ENGINEER will procure and maintain aircraft unmanned aerial systems insurance of $1,000,000 per occurrence. OWNER shall be made an additional insured on Commercial General and Automobile Liability insurance policies and certificates of insurance will be furnished to the OWNER. ENGINEER agrees to indemnify OWNER for third party personal injury and property damage claims to the extent caused by ENGINEER's negligent acts, errors or omissions. However, neither Party to this Agreement shall be liable to the other Party for any special, incidental, indirect, or consequential damages (including but not limited to loss of use or opportunity; loss of good will; cost of substitute facilities, goods, or services; cost of capital; and/or fines or penalties), loss of profits or revenue arising out of, resulting from, or in any way related to the Project or the Agreement from any cause or causes, including but not limited to any such damages caused by the negligence, errors or omissions, strict liability or breach of contract.

3. **OPINIONS OF PROBABLE COST (COST ESTIMATES)**
Any opinions of probable project cost or probable construction cost provided by ENGINEER are made on the basis of information available to ENGINEER and on the basis of ENGINEER's experience and qualifications, and represents its judgment as an experienced and qualified professional engineer. However, since ENGINEER has no control over the cost of labor, materials, equipment or services furnished by others, or over the contractor(s') methods of determining prices, or over competitive bidding or market conditions, ENGINEER does not guarantee that proposals, bids or actual project or construction cost will not vary from opinions of probable cost ENGINEER prepares.

4. **CONSTRUCTION PROCEDURES**
ENGINEER's observation or monitoring portions of the work performed under construction contracts shall not relieve the contractor from its responsibility for performing work in accordance with applicable contract documents. ENGINEER shall not control or have charge of, and shall not be responsible for, construction means, methods, techniques, sequences, procedures of construction, health or safety programs or precautions connected with the work and shall not manage, supervise, control or have charge of construction. ENGINEER shall not be responsible for the acts or omissions of the contractor or other parties on the project. ENGINEER shall be entitled to review all construction contract documents and to require that no provisions extend the duties or liabilities of ENGINEER beyond those set forth in this Agreement. OWNER agrees to include ENGINEER as an indemnified party in OWNER's construction contracts for the work, which shall protect ENGINEER to the same degree as OWNER. Further, OWNER agrees that ENGINEER shall be listed as an additional insured under the construction contractor's liability insurance policies.

5. **CONTROLLING LAW**
This Agreement is to be governed by the law of the state where ENGINEER's services are performed.

6. **SERVICES AND INFORMATION**
OWNER will provide all criteria and information pertaining to OWNER's requirements for the project, including design objectives and constraints, space, capacity and performance requirements, flexibility and expandability, and any budgetary limitations. OWNER will also provide copies of any OWNER-furnished Standard Details, Standard Specifications, or Standard Bidding Documents which are to be incorporated into the project.

OWNER will furnish the services of soils/geotechnical engineers or other consultants that include reports and appropriate professional recommendations when such services are deemed necessary by ENGINEER. The OWNER agrees to bear full responsibility for the technical accuracy and content of OWNER-furnished documents and services.

In performing professional engineering and related services hereunder, it is understood by OWNER that ENGINEER is not engaged in rendering any type of legal, insurance or accounting services, opinions or advice. Further, it is the OWNER's sole responsibility to obtain the advice of an attorney, insurance counselor or accountant to protect the OWNER's legal and financial interests. To that end, the OWNER agrees that OWNER or the OWNER's representative will examine all studies, reports, sketches, drawings, specifications, proposals and other documents, opinions or advice prepared or provided by ENGINEER, and will obtain the advice of an attorney, insurance counselor or other consultant as the OWNER deems necessary to protect the OWNER's interests before OWNER takes action or forebears to take action based upon or relying upon the services provided by ENGINEER.

7. **SUCCESSORS, ASSIGNS AND BENEFICIARIES**
OWNER and ENGINEER, respectively, bind themselves, their partners, successors, assigns, and legal representatives to the covenants of this Agreement. Neither OWNER nor ENGINEER will assign, sublet, or transfer any interest in this Agreement or claims arising therefrom without the written consent of the other. No third party beneficiaries are intended under this Agreement.

8. **RE-USE OF DOCUMENTS**
All documents, including all reports, drawings, specifications, computer software or other items prepared or furnished by ENGINEER pursuant to this Agreement, are instruments of service with respect to the project. ENGINEER retains ownership of all such documents. OWNER may retain copies of the documents for its information and reference in connection with the project; however, none of the documents are intended or represented to be suitable for reuse by OWNER or others on extensions of the project or on any other project. Any reuse without written verification or adaptation by ENGINEER for the specific purpose intended will be at OWNER's sole risk and without liability or legal exposure to ENGINEER, and OWNER will defend, indemnify and hold harmless ENGINEER from all claims, damages, losses and expenses, including attorney's fees, arising or resulting therefrom. Any such verification or adaptation will

entitle ENGINEER to further compensation at rates to be agreed upon by OWNER and ENGINEER.

9. TERMINATION OF AGREEMENT

OWNER or ENGINEER may terminate the Agreement, in whole or in part, by giving seven (7) days written notice to the other party. Where the method of payment is "lump sum," or cost reimbursement, the final invoice will include all services and expenses associated with the project up to the effective date of termination. An equitable adjustment shall also be made to provide for termination settlement costs ENGINEER incurs as a result of commitments that had become firm before termination, and for a reasonable profit for services performed.

10. SEVERABILITY

If any provision of this agreement is held invalid or unenforceable, the remaining provisions shall be valid and binding upon the parties. One or more waivers by either party of any provision, term or condition shall not be construed by the other party as a waiver of any subsequent breach of the same provision, term or condition.

11. INVOICES

ENGINEER will submit monthly invoices for services rendered and OWNER will make payments to ENGINEER within thirty (30) days of OWNER's receipt of ENGINEER's invoice.

ENGINEER will retain receipts for reimbursable expenses in general accordance with Internal Revenue Service rules pertaining to the support of expenditures for income tax purposes. Receipts will be available for inspection by OWNER's auditors upon request.

If OWNER disputes any items in ENGINEER's invoice for any reason, including the lack of supporting documentation, OWNER may temporarily delete the disputed item and pay the remaining amount of the invoice. OWNER will promptly notify ENGINEER of the dispute and request clarification and/or correction. After any dispute has been settled, ENGINEER will include the disputed item on a subsequent, regularly scheduled invoice, or on a special invoice for the disputed item only.

OWNER recognizes that late payment of invoices results in extra expenses for ENGINEER. ENGINEER retains the right to assess OWNER interest at the rate of one percent (1%) per month, but not to exceed the maximum rate allowed by law, on invoices which are not paid within thirty (30) days from the date OWNER receives ENGINEER's invoice. In the event undisputed portions of ENGINEER's invoices are not paid when due, ENGINEER also reserves the right, after seven (7) days prior written notice, to suspend the performance of its services under this Agreement until all past due amounts have been paid in full.

12. CHANGES

The parties agree that no change or modification to this Agreement, or any attachments hereto, shall have any force or effect unless the change is reduced to writing, dated, and made part of this Agreement. The execution of the change shall be authorized and signed in the same manner as this Agreement. Adjustments in the period of services and in compensation shall be in accordance with applicable paragraphs and sections of this Agreement. Any proposed fees by ENGINEER are estimates to perform the services required to complete the project as ENGINEER understands it to be defined. For those projects involving conceptual or process development services, activities often are not fully definable in the initial planning. In any event, as the project progresses, the facts developed may dictate a change in the services to be performed, which may alter the scope. ENGINEER will inform OWNER of such situations so that changes in scope and adjustments to the time of performance and compensation can be made as required. If such change, additional services, or suspension of services results in an increase or decrease in the cost of or time required for performance of the services, an equitable adjustment shall be made, and the Agreement modified accordingly.

13. CONTROLLING AGREEMENT

These Terms and Conditions shall take precedence over any inconsistent or contradictory provisions contained in any proposal, contract, purchase order, requisition, notice-to-proceed, or like document.

14. EQUAL EMPLOYMENT AND NONDISCRIMINATION

In connection with the services under this Agreement, ENGINEER agrees to comply with the applicable provisions of federal and state Equal Employment Opportunity for individuals based on color, religion, sex, or national origin, or disabled veteran, recently separated veteran, other protected veteran and armed forces service medal veteran status, disabilities under provisions of executive order 11246, and other employment, statutes and regulations, as stated in Title 41 Part 60 of the Code of Federal Regulations § 60-1.4 (a-f), § 60-300.5 (a-e), § 60-741 (a-e).

15. HAZARDOUS MATERIALS

OWNER represents to ENGINEER that, to the best of its knowledge, no hazardous materials are present at the project site. However, in the event hazardous materials are known to be present, OWNER represents that to the best of its knowledge it has disclosed to ENGINEER the existence of all such hazardous materials, including but not limited to asbestos, PCB's, petroleum, hazardous waste, or radioactive material located at or near the project site, including type, quantity and location of such hazardous materials. It is acknowledged by both parties that ENGINEER's scope of services do not include services related in any way to hazardous materials. In the event ENGINEER or any other party encounters undisclosed hazardous materials, ENGINEER shall have the obligation to notify OWNER and, to the extent required by law or regulation, the appropriate governmental officials, and ENGINEER may, at its option and without liability for delay, consequential or any other damages to OWNER, suspend performance of services on that portion of the project affected by hazardous materials until OWNER: (i) retains appropriate specialist consultant(s) or contractor(s) to identify and, as appropriate, abate, remediate, or remove the hazardous materials; and (ii) warrants that the project site is in full compliance with all applicable laws and regulations. OWNER acknowledges that ENGINEER is performing professional services for OWNER and that ENGINEER is not and shall not be required to become an "arranger," "operator," "generator," or "transporter" of hazardous materials, as defined in the Comprehensive Environmental Response, Compensation, and Liability Act of 1990 (CERCLA), which are or may be encountered at or near the project site in connection with ENGINEER's services under this Agreement. If ENGINEER's services hereunder cannot be performed because of the existence of hazardous materials, ENGINEER shall be entitled to terminate this Agreement for cause on 30 days written notice. To the fullest extent permitted by law, OWNER shall indemnify and hold harmless ENGINEER, its officers, directors, partners, employees, and subconsultants from and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) caused by, arising out of or resulting from hazardous materials, provided that (i) any such cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or injury to or destruction of tangible property (other than completed Work), including the loss of use resulting therefrom, and (ii) nothing in this paragraph shall obligate OWNER to indemnify any individual or entity from and against the consequences of that individual's or entity's sole negligence or willful misconduct.

16. EXECUTION

This Agreement, including the exhibits and schedules made part hereof, constitute the entire Agreement between ENGINEER and OWNER, supersedes and controls over all prior written or oral

understandings. This Agreement may be amended, supplemented or modified only by a written instrument duly executed by the parties.

17. **ALLOCATION OF RISK**
OWNER AND ENGINEER HAVE EVALUATED THE RISKS AND REWARDS ASSOCIATED WITH THIS PROJECT, INCLUDING ENGINEER'S FEE RELATIVE TO THE RISKS ASSUMED, AND AGREE TO ALLOCATE CERTAIN OF THE RISKS, SO, TO THE FULLEST EXTENT PERMITTED BY LAW, THE TOTAL AGGREGATE LIABILITY OF ENGINEER (AND ITS RELATED CORPORATIONS, SUBCONSULTANTS AND EMPLOYEES) TO OWNER AND THIRD PARTIES GRANTED RELIANCE IS LIMITED TO THE LESSER OF $1,000,000 OR ITS FEE, FOR ANY AND ALL INJURIES, DAMAGES, CLAIMS, LOSSES, OR EXPENSES (INCLUDING ATTORNEY AND EXPERT FEES) ARISING OUT OF ENGINEER'S SERVICES OR THIS AGREEMENT REGARDLESS OF CAUSE(S) OR THE THEORY OF LIABILITY, INCLUDING NEGLIGENCE, INDEMNITY, OR OTHER RECOVERY.

18. **LITIGATION SUPPORT**
In the event ENGINEER is required to respond to a subpoena, government inquiry or other legal process related to the services in connection with a legal or dispute resolution proceeding to which ENGINEER is not a party, OWNER shall reimburse ENGINEER for reasonable costs in responding and compensate ENGINEER at its then standard rates for reasonable time incurred in gathering information and documents and attending depositions, hearings, and trial.

19. **NO THIRD PARTY BENEFICIARIES**
No third party beneficiaries are intended under this Agreement. In the event a reliance letter or certification is required under the scope of services, the parties agree to use a form that is mutually acceptable to both parties.

20. **UTILITY LOCATION**
If underground sampling/testing is to be performed, a local utility locating service shall be contacted to make arrangements for all utilities to determine the location of underground utilities. In addition, OWNER shall notify ENGINEER of the presence and location of any underground utilities located on the OWNER's property which are not the responsibility of private/public utilities. ENGINEER shall take reasonable precautions to avoid damaging underground utilities that are properly marked. The OWNER agrees to waive any claim against ENGINEER and will indemnify and hold ENGINEER harmless from any claim of liability, injury or loss caused by or allegedly caused by ENGINEER's damaging of underground utilities that are not properly marked or are not called to ENGINEER's attention prior to beginning the underground sampling/testing.

21. **UNMANNED AERIAL SYSTEMS**
If operating UAS, ENGINEER will obtain all permits or exemptions required by law to operate any UAS included in the services. ENGINEER's operators have completed the training, certifications and licensure as required by the applicable jurisdiction in which the UAS will be operated. OWNER will obtain any necessary permissions for ENGINEER to operate over private property, and assist, as necessary, with all other necessary permissions for operations.

22. **OPERATIONAL TECHNOLOGY SYSTEMS**
OWNER agrees that the effectiveness of operational technology systems ("OT Systems") and features designed, recommended or assessed by ENGINEER are dependent upon OWNER's continued operation and maintenance of the OT Systems in accordance with all standards, best practices, laws, and regulations that govern the operation and maintenance of the OT Systems. OWNER shall be solely responsible for operating and maintaining the OT System in accordance with applicable industry standards (i.e. ISA, NIST, etc.) and best practices, which generally include but are not limited to, cyber security policies and procedures, documentation and training requirements, continuous monitoring of assets for tampering and intrusion, periodic evaluation for asset vulnerabilities, implementation and update of appropriate technical, physical, and operational standards, and offline testing of all software/firmware patches/updates prior to placing updates into production. Additionally, OWNER recognizes and agrees that OT Systems are subject to internal and external breach, compromise, and similar incidents. Security features designed, recommended or assessed by ENGINEER are intended to reduce the likelihood that OT Systems will be compromised by such incidents. However, ENGINEER does not guarantee that OWNER's OT Systems are impenetrable and OWNER agrees to waive any claims against ENGINEER resulting from any such incidents that relate to or affect OWNER's OT Systems.

EXECUTIVE SUMMARY **KENTUCKY INFRASTRUCTURE AUTHORITY** **FUND F, FEDERALLY ASSISTED DRINKING WATER** **REVOLVING LOAN FUND**		Reviewer Date KIA Loan Number WRIS Number	Ashley Adams February 6, 2020 F20-034 WX21143017

BORROWER	LYON COUNTY WATER DISTRICT LYON COUNTY

BRIEF DESCRIPTION

This project will help to improve water quality and resolve pressure issues throughout the system by rehabilitating 2 water tanks, building an interconnect to loop lines for better water circulation, upsizing a line in the Tinsley Creek Subdivision, and replacing a creek crossing near KY 274 that is in danger of failure.

PROJECT FINANCING		PROJECT BUDGET	RD Fee %	Actual %	
Fund F Loan	$2,094,675	Administrative Expenses			$50,000
		Legal Expenses			15,000
		Eng - Design / Const	7.8%	4.4%	81,150
		Eng - Insp	4.8%	5.8%	106,025
		Construction			1,675,000
		Contingency			167,500
TOTAL	$2,094,675	TOTAL			$2,094,675

REPAYMENT	Rate	2.50%	Est. Annual Payment	$138,967
	Term	20 Years	1st Payment	6 Mo. after first draw
PROFESSIONAL SERVICES	Engineer	HDR		
	Bond Counsel	Rubin & Hays		
PROJECT SCHEDULE	Bid Opening	Mar-20		
	Construction Start	Apr-20		
	Construction Stop	Aug-21		
DEBT PER CUSTOMER	Existing	$1,891		
	Proposed	$2,473		
OTHER DEBT		See Attached		
OTHER STATE-FUNDED PROJECTS LAST 5 YRS		See Attached		

RESIDENTIAL RATES		Users	Avg. Bill	
	Current	2,649	$46.24	(for 4,000 gallons)
	Additional	0	$46.24	(for 4,000 gallons)

REGIONAL COORDINATION This project is consistent with regional planning recommendations.

CASHFLOW	Cash Flow Before Debt Service	Debt Service	Cash Flow After Debt Service	Coverage Ratio
Audited 2016	278,617	120,909	157,708	2.3
Audited 2017	401,254	126,621	274,633	3.2
Audited 2018	281,165	224,090	57,075	1.3
Projected 2019	281,165	261,542	19,623	1.1
Projected 2020	281,165	253,720	27,445	1.1
Projected 2021	281,165	254,044	27,121	1.1
Projected 2022	476,894	398,446	78,448	1.2
Projected 2023	457,441	398,781	58,660	1.1

Reviewer: Ashley Adams
Date: February 6, 2020
Loan Number: F20-034

KENTUCKY INFRASTRUCTURE AUTHORITY
DRINKING WATER STATE REVOLVING FUND (FUND F)
LYON COUNTY WATER DISTRICT, LYON COUNTY
PROJECT REVIEW
WX21143017

I. PROJECT DESCRIPTION

The Lyon County Water District is requesting a Fund F loan in the amount of $2,094,675 for the Water System and Storage Tank Improvements project. This project will address several areas throughout the distribution system to help improve water age, water quality, pressure issues, and maintenance in the system.

Two water tanks will be rehabilitated including the Lamasco glass lined standpipe tank and the Jack Thompson tank. The Lamasco tank needs coating on the interior to mitigate a rust problem as well as installation of a mixing system and work on the exterior valve vault to install a bypass valve for better control at the tank site. The Jack Thompson elevated storage tank needs coating on the interior and exterior per the latest inspection.

The project will also loop several lines in the KY 295 area in order to increase circulation of water and improve water quality. This includes an interconnect between KY 295 and KY 373 and another between US 62 and KY 295. The KY 373 to KY 295 Loop project is a project that loops a line that dead ends at the City of Eddyville's master meter valve. The line is also the first phase in allowing the Crittenden Livingston County Water District to serve the City of Kuttawa as a backup source or possibly a primary source. In addition, the loop will allow additional water to be transmitted by the City of Eddyville to the City of Kuttawa as a backup water source.

The US 62 & KY 295 project provides another connection between the Lyon County Water District and the City of Kuttawa. Along with the KY 373 to KY 295 project described above, the project provides a means of allowing Kuttawa to receive water from the Crittenden Livingston County Water District and a higher volume feed from the City of Eddyville. The new feed will currently serve as a backup water supply for Kuttawa and could serve as Kuttawa's primary water supply in the event Kuttawa ceases operation of its water treatment plant.

In addition, an undersized 2" line in the Tinsley Creek Subdivision will be replaced with an adequately sized line to resolve water quality and pressure issues in the area and a creek crossing near KY 274 will also be replaced as the line is very shallow and in danger of immediate failure.

The Lyon County Water District is a PSC regulated distribution system that does not produce water. The District purchases approximately 111 MG of water annually

primarily from the Kuttawa Water Department (41 MG) and Princeton Water (41 MG) in addition to the Crittenden-Livingston County Water District (12 MG), and the Eddyville Water Department (6 MG).

II. PROJECT BUDGET

		Total
Administrative Expenses	$	50,000
Legal Expenses		15,000
Engineering Fees - Design		50,000
Engineering Fees - Construction		31,150
Engineering Fees - Inspection		106,025
Construction		1,675,000
Contingency		167,500
Total	**$**	**2,094,675**

III. PROJECT FUNDING

		Amount	%
Fund F Loan	$	2,094,675	100%
Total	**$**	**2,094,675**	**100%**

IV. KIA DEBT SERVICE

Construction Loan	$	2,094,675
Less: Principal Forgiveness		0
Amortized Loan Amount	$	2,094,675
Interest Rate		2.50%
Loan Term (Years)		20
Estimated Annual Debt Service	$	133,730
Administrative Fee (0.25%)		5,237
Total Estimated Annual Debt Service	**$**	**138,967**

V. PROJECT SCHEDULE

Bid Opening	March 2020
Construction Start	April 2020
Construction Stop	August 2021

VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

A) Customers

	Current
Residential	2,607
Commercial	42
Total	**2,649**

B) Rates

	Current	Prior
Date of Last Rate Increase	01/07/16	04/23/15
Minimum (2,000 gallons)	$25.00	$20.02
Next 3,000 Gallons	10.62	8.50
Cost for 4,000 gallons	**$46.24**	**$37.02**
Increase %	24.9%	
Affordability Index (Rate/MHI)	1.1%	

VII. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2013-2017, the Utility's service area population was 4,039 with a Median Household Income (MHI) of $51,086. The median household income for the Commonwealth is $46,535. The project will qualify for a 2.5% interest rate based on MHI.

Population			County Unemployment	
Year	County	% Change	Date	Rate
1980	6,490		June 2005	7.0%
1990	6,624	2.1%	June 2010	10.1%
2000	8,080	22.0%	June 2015	5.2%
2010	8,314	2.9%	June 2019	5.1%
Current	8,268	-0.6%		
Cumulative %		27.4%		

VIII. 2019 CAPITALIZATION GRANT EQUIVALENCIES

1) Green Project Reserve - The Drinking Water capitalization grant does not contain a "green" requirement.

2) Additional Subsidization – This project does not qualify for additional subsidization.

IX. FINANCIAL ANALYSIS

Financial information was obtained from the audited financial statements for the years ended June 30, 2016 through June 30, 2018. The non-cash impact of GASB 68, Accounting and Financial Reporting for Pensions, has been removed from fiscal 2016-2018 operating expenses and GASB 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, has been removed from 2018 operating expenses. Percentage references in the History section below are based on whole dollar amounts and not the rounded amounts presented.

HISTORY

Revenues have averaged approximately $1.2 million from 2016 to 2018 while operating expenses have increased 3.4% from $922,389 in 2016 to $953,566 in 2018. The District's last rate increase occurred in 2016 when rates jumped 25%. The District is currently undergoing a rate study by their engineering firm in order to apply for another rate increase at the PSC which will include projected revenue needs for this project as well as several other necessary capital projects for the system. Debt coverage was 2.3 in 2016, 3.2 in 2017, and 1.3 in 2018. Debt service was adjusted in 2017 to remove an interim financing payoff to Kentucky Rural Water Association which was replaced with KIA loan F12-02 for another water quality system improvement project to normalize the debt coverage ratio.

The balance sheet reflects a current ratio of 2.0, a debt to equity ratio of 1.6, 52.5 days sales in accounts receivable, and 5.4 months operating expenses in unrestricted cash.

PROJECTIONS

Projections are based on the following assumptions:

1) Revenues will increase at least $220,000 or 18% annually upon approval of the PSC in order to support inflation and debt service for this loan.
2) Expenses will increase 2% for inflation starting in the year debt service begins on this pending loan. Inflation expense has been removed from projections in 2019-2021 as this is the only thing driving rate increase needs during that time period.
3) Debt service coverage is 1.2 in 2022 when principal and interest repayments begin.

Based on the pro forma assumptions, the utility shows adequate cash flow to repay the KIA Fund F loan.

REPLACEMENT RESERVE

The replacement reserve will be 5% ($104,000 total) of the final amount borrowed (prior to principal forgiveness, if any) to be funded annually ($5,200 yearly) each December 1 for 20 years and maintained for the life of the loan.

X. DEBT OBLIGATIONS

		Outstanding	Maturity
Regions - Series 2013 C	$	1,115,000	2040
USDA - Series 2016		1,900,000	2046
KIA Loan (F12-02)		1,959,089	2038
Capital Lease		34,774	2020
Total	**$**	**5,008,863**	

XI. CONTACTS

Legal Applicant	
Entity Name	Lyon County Water District
Authorized Official	Don Robertson (Chairman)
County	Lyon
Email	lyoncountyw24787@bellsouth.net
Phone	270-388-0271
Address	PO Box 489
	Kuttawa, KY 42055

Applicant Contact	
Name	Dixie Cayce
Organization	Lyon County Water District
Email	dixie.cayce@att.net
Phone	270-388-0271
Address	PO Box 489
	Kuttawa, KY 42055

Project Administrator	
Name	Kyle Cunningham
Organization	PEADD
Email	kyle.cunningham@ky.gov
Phone	270-886-9484
Address	300 Hammond Dr
	Hopkinsville, KY 42240

Consulting Engineer	
PE Name	Mike Hansen
Firm Name	HDR
Email	mike.hansen@hdrinc.com
Phone	270-443-7600
Address	2550 Irvin Cobb Rd
	Paducah, KY 42003

XII. RECOMMENDATIONS

KIA staff recommends approval of the loan with the standard conditions:

1) By March 1, 2020, the District will need to apply to the Public Service Commission (PSC) for debt authorization for the $2,094,675 million loan. This debt authorization application should include a forecast for meeting debt service projected through no less than 2025.

2) By March 1, 2020, the District will need a resolution from the Lyon County Water District Board, demonstrating their intentions to increase revenues as necessary and authorized by the PSC to meet the loan requirements over the life of the loan. KIA Staff review indicates that revenues would need to increase by $220,000 annually which equates to an approximate 18% rate increase by January 1, 2022 to meet expenses and debt service in the first full year of repayment.

3) Prior to the assistance agreement being executed, the District must receive a Certificate of Public Convenience and Necessity from the PSC for any portion of the project that may be necessary or provide an opinion from the staff of the PSC that a CPCN is not required for any portion of the assets to be constructed as part of the loan agreement.

LYON COUNTY WATER DISTRICT

FINANCIAL SUMMARY (DECEMBER YEAR END)

	Audited 2016	Audited 2017	Audited 2018	Projected 2019	Projected 2020	Projected 2021	Projected 2022	Projected 2023
Balance Sheet								
Assets								
Current Assets	469,955	712,802	652,731	656,625	662,114	667,538	714,927	726,659
Other Assets	11,167,361	9,253,211	8,836,080	8,393,442	9,134,704	9,875,706	9,558,066	9,224,595
Total	11,637,316	9,966,013	9,488,811	9,050,067	9,796,818	10,543,244	10,272,993	9,951,254
Liabilities & Equity								
Current Liabilities	4,415,176	2,346,033	333,446	311,515	316,118	325,755	469,395	474,095
Long Term Liabilities	3,431,550	3,656,711	5,443,627	4,642,067	5,510,979	6,371,653	6,042,750	5,710,647
Total Liabilities	7,846,726	6,002,744	5,777,073	4,953,582	5,827,097	6,697,408	6,512,145	6,184,742
Net Assets	3,790,590	3,963,269	3,711,738	4,096,485	3,969,721	3,845,836	3,760,848	3,766,512
Cash Flow								
Revenues	1,200,355	1,244,269	1,231,775	1,231,775	1,231,775	1,231,775	1,451,775	1,451,775
Operating Expenses	922,389	844,700	953,566	953,566	953,566	953,566	977,837	997,290
Other Income	651	1,685	2,956	2,956	2,956	2,956	2,956	2,956
Cash Flow Before Debt Service	278,617	401,254	281,165	281,165	281,165	281,165	476,894	457,441
Debt Service								
Existing Debt Service	120,909	126,621	224,090	261,542	253,720	254,044	259,479	259,814
Proposed KIA Loan	0	0	0	0	0	0	138,967	138,967
Total Debt Service	120,909	126,621	224,090	261,542	253,720	254,044	398,446	398,781
Cash Flow After Debt Service	157,708	274,633	57,075	19,623	27,445	27,121	78,448	58,660
Ratios								
Current Ratio	0.1	0.3	2.0	2.1	2.1	2.0	1.5	1.5
Debt to Equity	2.1	1.5	1.6	1.2	1.5	1.7	1.7	1.6
Days Sales in Accounts Receivable	47.1	54.9	52.5	52.5	52.5	52.5	52.5	52.5
Months Operating Expenses in Unrestricted Cash	3.6	6.9	5.4	5.4	5.5	5.6	5.7	5.7
Debt Coverage Ratio	2.3	3.2	1.3	1.1	1.1	1.1	1.2	1.1

KENTUCKY INFRASTRUCTURE AUTHORITY

Andy Beshear
Governor

100 Airport Road
Frankfort, Kentucky 40601
(502) 573-0260
kia.ky.gov

Sandy Williams
Deputy Executive Director

July 30, 2021

Don Robertson, Chairman
Lyon County Water District
PO Box 489
Kuttawa, KY 42055

KENTUCKY INFRASTRUCTURE AUTHORITY
FEDERALLY ASSISTED DRINKING WATER REVOLVING LOAN FUND
CONDITIONAL COMMITMENT LETTER (F20-034)
EXTENSION #2

Dear Mr. Robertson:

The Kentucky Infrastructure Authority ("the Authority") has approved an extension of the Drinking Water State Revolving Fund (DWSRF) loan F20-034 for the Water System and Storage Tank Improvements Project. The Authority has extended the deadline for the District to meet the conditions set forth in the conditional commitment letter for a period of six (6) months. The original expiration date was February 10, 2021. The first extension expiration date is August 10, 2021. The second extension expiration date will be February 10, 2022. If the project does not meet the conditions by the new expiration date, the commitment may be rescinded.

All original terms and conditions from the commitment letter dated February 6, 2020, shall remain in effect.

Please inform the Authority of any changes in your financing plan as soon as possible. We wish you every success for this project to benefit both your community and the Commonwealth.

Sincerely,

Sandy Williams

Sandy Williams
Deputy Executive Director

Please sign and return a copy of this letter indicating your acceptance of this commitment letter extension and its terms.

_____ _____

Accepted Date

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC PROPOSED ADJUSTMENT OF THE WHOLESALE WATER SERVICE RATES OF PRINCETON WATER AND WASTEWATER	)))	CASE NO. 2019-00444

ORDER

On November 27, 2019, Princeton Water and Wastewater (Princeton) filed with the Commission a revised tariff sheet setting forth proposed adjustments to its existing rates for wholesale water service to Caldwell County Water District (Caldwell District) and Lyon County Water District (Lyon District) (collectively Intervenors) effective on January 1, 2020. Princeton's current monthly wholesale water rates to each of these wholesale purchasers consist of a Monthly Customer Service Charge per meter of $4.00 and a usage charge of $2.2871 per 100 cubic feet. Princeton's proposal increases the Monthly Customer Service Charge per meter by $2.00, or 50 percent, to $6.00 and increases the usage charge by $0.6829 per 100 cubic feet, or 29.9 percent, from $2.2871 to $2.9700 per 100 cubic feet.[1] Princeton further proposes to assess a surcharge over 36 months to the parties that initiate an investigation to cover any rate case expenses it may incur to participate in or in defense of its proposed rates in any Commission proceeding that is initiated to investigate the reasonableness of the proposed rates. The proposed tariff listed the Rate Case Expense Surcharge as $2,750 per month.

[1] City of Princeton Water & Wastewater Commission, P.S.C. KY. NO. 1, 61h Revised Sheet No. 1, effective Aug. 1, 2014.

The Commission has jurisdiction over Princeton's rates for wholesale water service to Caldwell District and Lyon District pursuant to KRS 278.200 and the Kentucky Supreme Court's decision in *Simpson County Water District v. City of Franklin,* 872 S.W.2d 460, 463 (Ky. 1994), in which the Court specifically stated that "where contracts have been executed between a utility and a city . . . KRS 278.200 is applicable and requires that by so contracting the City relinquishes the exemption and is rendered subject to the PSC rates and service regulation."[2] Following the Court's decision in *Simpson County*, the Commission has allowed city-owned utilities to file rate adjustments by a tariff filing, and if a hearing is requested and the Commission suspends the proposed rate, then the requirements, the procedures set forth in KRS Chapter 278, and the Commission's regulations apply equally to filings by a city-owned utility or a jurisdictional utility.[3] Therefore, the parties in this case present two issues to the Commission. The first issue is whether Princeton's proposed rate increase is fair, just, and reasonable based upon the evidentiary record. The second issue is whether Princeton's rate case expense and the proposed 36-month surcharge to recover that expense is fair, just, and reasonable based upon the evidentiary record.

BACKGROUND

Princeton owns and operates water and sewer facilities that provide water service to 3,386 retail water customers, and 2,878 sewer customers, located in and near the city

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[2] *Simpson County Water District v. City of Franklin*, 872 S.W.2d 460, 463 (Ky. 1994).

[3] *Id.; City of Danville v. Public Service Comm'n, et al.,* Civil Action No. 15-CI-00989, *Opinion and Order* (Franklin Circuit Court Division II, June 14, 1016).

of Princeton and surrounding areas in Caldwell and Lyon counties, Kentucky. It also provides wholesale water service to Caldwell District and Lyon District.[4]

Caldwell District is a water district organized in 1966 pursuant to KRS Chapter 74 that owns and operates a water distribution system through which it provides water service to approximately 2,100 retail customers in Caldwell, Crittenden, and Lyon counties, Kentucky.[5]

Lyon District was formed in 1978 pursuant to KRS Chapter 74, and it owns and operates a water distribution system through which it provides water service to approximately 2,600 retail customers in Lyon and Caldwell counties. Caldwell District and Lyon District are subject to full rates and service regulation by the Commission.

PROCEDURAL

On November 27, 2019, pursuant to 807 KAR 5:011, Princeton filed a revised tariff proposing to increase its existing rate for wholesale water service to Caldwell District and Lyon District.[6] On December 13, 2019, Caldwell District and Lyon District filed objections to Princeton's proposed wholesale rate and requested further proceedings to determine the reasonableness of the proposed wholesale water rate. By Order dated December 20, 2019, pursuant to KRS 278.190(2), the Commission determined that further proceedings

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[4] Princeton's Response to Staff's First Information Request at 2; Princeton's Response to Staff's Second Information Request, 2-12, 1-16.

[5] *Annual Report of Caldwell County Water District to the Public Service Commission for the Calendar Year Ended December 31, 2018* at 12 and 49, Caldwell County Water District and Lyon County Water District's Joint Post-Hearing Brief, p 2 (filed May 22, 2020), and *Annual Report of Lyon County Water District to the Public Service Commission for the Calendar Year Ended December 31, 2018* at 12 and 49.

[6] KRS 278.190(3) requires that the Commission render a final decision on Princeton's proposed rate no later than ten months after the filing of the schedule. This ten-month period ends on September 27, 2020.

were necessary and suspended the rates for five months, up to and including May 31, 2020. The Commission further granted Caldwell District and Lyon District leave to intervene in this current proceeding.

The Commission also established a procedural schedule to ensure a complete record and an orderly review of Princeton's proposal. The Commission directed Princeton to file certain information and to respond to Caldwell District's and Lyon District's protest letters in Staff's first request for information. Princeton responded to three rounds of information requests from Staff, in addition to post-hearing requests and supplemental filings. Princeton also responded to one request for information and post-hearing requests for information from the Intervenors. Caldwell District and Lyon District filed direct testimony on March 20, 2020, and responded to one request for information and post-hearing requests for information from both Staff and Princeton.

In response to Princeton's February 15, 2020 request for an extension of 14 days in which to file responses to request for information, the Commission granted Princeton's motion in Commission's February 21, 2019 Order. The Commission also found good cause for Princeton to agree not to implement the proposed rates subject to refund earlier than June 15, 2020, because it is a time commensurate with the extension of 14 days to the deadlines remaining in this case.

The public hearing was held on May 5, 2020, via video conferencing in order to comply with the COVID-19 state of emergency. Testifying at this hearing on behalf of Princeton were Finance Director Tracy Musgove, Superintendent James Noel, and Project Engineer Ricky Oakley. Princeton also made Project Engineer Eric Broomfield available as a witness. Alan Vilines, from the Kentucky Rural Water Association, testified

on behalf of Caldwell District and Lyon District. CEO Jimmy Littlefield of Caldwell District also testified on behalf of Caldwell District.

TESTIMONY

During the May 5, 2020 hearing, Ms. Musgove testified that Princeton notified the Intervenors of its proposed rate increase and the conflict (referring to the case herein) could have been settled a long time ago.[7] Ms. Musgove testified that Princeton set up a meeting in October and went on to state that they put the rates "out there for them" but received no response.[8] In recross-examination, counsel for the Intervenors questioned Ms. Musgove regarding Caldwell District and Lyon District's hearing Exhibit 5, which indicated an offer of negotiation on behalf of Caldwell District.[9] In further questioning, Ms. Musgove indicated several missed opportunities to resolve disagreements over the proposed rates were not pursued.[10] Further testimony on behalf of Princeton from James Noel indicated that Princeton did not negotiate or attempt to negotiate with the Intervenors.[11] Ms. Musgove testified that Princeton believed the rates proposed on its behalf were the result of a thorough analysis, and there was no reason to negotiate.[12]

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[7] *Id.* at 13:53:24-13:54:44.

[8] *Id. at* 13:54:29-:13:54:37.

[9] May 5, 2020 H.V.T., 14:15:02-14:21:00.

[10] *Id.* Musgove, at 14:15:02 stating the water districts had no follow-up to the October meeting; 14:15:33 stating the Intervenors had no follow-up; 14:16:11 stating she had been told the water districts were going forward with the protest and there was no reason to negotiate; 14:16:42 stating the Intervenors were "half-hearted" but no support for how Musgove knew the attempt to negotiate in the letters were a "half-hearted" attempt.

[11] May 5, 2020, H.V.T. Noel, at 14:51:30.

[12] May 5, 2020, H.V.T. Musgove at 14:19:57.

The Commission notes that Ms. Musgrove did not provide an accurate representation of the negotiation attempts made by the Intervenors. The Commission further notes that Ms. Musgove admitted knowing about the letters contained in Caldwell District and Lyon District's hearing Exhibit 5, despite previously testifying that the Intervenors made no attempt to negotiate goes to the credibility of her testimony.[13]

Ms. Musgove testified repeatedly to her qualifications as an expert at the hearing and throughout her prefiled direct testimony; however, she admitted that the "unit cost approach" may have been too simplistic in comparison with the option to perform a cost-of-service study (COSS).[14] Ms. Musgove testified that Princeton's proposed rates compared to the Intervenors' counter proposal from Mr. Vilines were the result of differing methods that were not necessarily wrong.[15] However, when Staff asked Ms. Musgove if she reviewed Mr. Vilines's proposed analysis, she stated that she tried to,[16] implying to the Commission that she did not understand how to analyze a COSS. Ms. Musgove, however, admitted to learning about aspects of the utility ratemaking process throughout this case.[17] Based upon her testimony, the Commission finds that Ms. Musgove's difficulty in applying basic tenets of utility ratemaking concepts leads the Commission to conclude that Ms. Musgove is not qualified to testify as a utility rates expert. This, coupled

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[13] May 5, 2020 H.V.T. Musgove, 14:15:02-14:21:00.

[14] *Id.* Musgove, 9:58:00.

[15] *Id.* at 13:54:55-13:55:24.

[16] *Id.* at 13:54:44.

[17] *Id.* at 13:56:45 stating that she recognizes some changes she could make; 13:57:09 stating that she was not aware of NARUC recommended depreciation calculations or analysis; 13:57:18 stating that she has "better numbers" now; 13:57:26 stating that "knowing now, what I know" she would make changes to the proposed rate.

with Princeton's strict reliance on the flawed "unit cost approach," goes to the weight of the evidence in the record, and the Commission weighs this in consideration of the evidence she provided.

TEST PERIOD

The Commission accepts the 12-month period ending June 30, 2019 (Fiscal Year 2019) as initially proposed by Princeton as the test period for determining the reasonableness of the proposed wholesale rate. In using this historic test year, the Commission has given full consideration to appropriate known and measurable changes.

REVENUES AND EXPENSES

Princeton included with its November 27, 2019 tariff filing a comparative schedule of its water production costs for the Fiscal Years 2014 through 2019. According to this schedule, Princeton recorded water production cost for the fiscal year ending June 30, 2019, of $1,925,573. In its pro forma income statements filed on April 20, 2020, Princeton reported operating revenues and operating expenses for the Fiscal Year 2019, of $1,571,377 and $1,578,789, respectively.[18] The Commission's review of Princeton's test-year operating revenues and expenses are set forth below.

Caldwell District and Lyon District objected to Princeton's proposed revenue requirement increase and proposed several revisions to Princeton's budgetary adjustments. Below, the Commission discusses Princeton's budgetary adjustments and is making adjustments to the Fiscal Year 2019 income state that will result in rates that

[18] Princeton's Amended Response to Commission Staff's Second Request for Information (Staff's Second Request), Item 1 filed on April 17, 2020.

are fair, just and reasonable. In calculating its adjustments, the Commission has also taken into consideration the adjustments proposed by Caldwell District and Lyon District.

Customer Service Charge

Princeton reported customer services revenue for its combined water and wastewater divisions of $198,648. Using Princeton's current monthly customer service charge of $4 and the test-year customers of 3,386, the total customer service revenue for the water division is $162,528. Accordingly, the Commission is decreasing Princeton's test-year revenues by $36,120 for a total customer service revenue of $162,528.[19]

Employee Salaries

There has been confusion surrounding Princeton's current Director of Finance. In the pro forma income statement, Princeton stated that its Director of Finance is retiring but that a new full time administrative position had been added. To justify recovering the Director of Finance's salary for January 2020 through mid-June 2020, Princeton explained that

> [t]he Director of Finance had made plans to retire as of December 31, 2019. Another administrative position was made available and the position was filled in November. Therefore, the Director of Finance's total wages and employer paid benefits from January through mid-June are applicable to the rate case and should be reimbursed.[20]

In its responses to Commission Staff's Post Hearing Data Request, Princeton states that Tracy Musgove is currently employed by Princeton as the Director of Finance and Special Projects. She is considered a "fulltime" employee as defined in the employee

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[19] *See* Appendix A, Adjustment A.

[20] Princeton's Responses to Staff's Second Information Request, Item 3.

handbook.[21] Given Princeton's response, the Commission finds that Ms. Musgove is currently employed by Princeton and has included her salary in its pro forma employee salary expense.

According to Princeton, it has historically operated its maintenance department with seven employees and that one of its maintenance employees recently resigned.[22] A major factor affecting Princeton's decision to fill the vacant position will be the outcome of this rate case and, specifically, whether there will be sufficient revenue to fill that position.[23] The Commission uses the ratemaking criteria of known and measurable changes in evaluating a utility's proposed pro forma adjustments. In this instance, Princeton has not given a date certain that a new maintenance employee will be hired and has only provided a projected cost for the new employee. Given the uncertainty surrounding the hiring of a new maintenance employee, the Commission finds that Princeton's adjustment as proposed fails to meet the known and measurable criteria and, therefore, should be denied. Caldwell District and Lyon District state that Princeton's test-year wage and benefit expense is not based on a wage and salary survey and Princeton has not performed such a survey.[24]

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[21] Princeton's Responses to Commission Staff's Post Hearing Data Request, Item 1.

[22] Princeton's Brief at 10.

[23] *Id.* at 1–11.

[24] May 5, 2020 H.V.T, Musgove, 13:23:37-13:24:80. Caldwell District and Lyon District Post-Hearing Brief at 10 (filed May 22, 2020). The brief goes on to discuss Princeton's filing of a comparison of benefits as a supplement to its response to Staff's Second Request for Information, 2–9. Caldwell District and Lyon District argue the Commission should disregard this comparison as unreliable. The Commission agrees.

An adjustment to reflect the wage increases Princeton gave its employees in Fiscal Year 2020 would meet the ratemaking criteria of being know and measurable. The wage increases have already been granted and they occurred shortly after the close of Fiscal Year 2019. The Commission is adjusting test-year salaries and wages expense to reflect the current staff level and the 2020 wages,[25] which results in an increase of $64,431 in wages and salaries.[26]

	Employee Salaries and Wages		
	Pro Forma	Reported	Adjustment
Administration	$ 250,866	$ 220,629	$ 30,237
Water Treatment Plant	200,217	178,041	22,176
Maintenance	263,564	251,546	12,018
Employee Salaries	$ 714,647	$ 650,216	$ 64,431

Payroll Taxes – FICA

Princeton reported test-year payroll tax - FICA expense of $48,413.[27] Applying the FICA tax rate of 7.65 percent to Princeton's pro forma employee salaries and wage expenses result in a pro forma payroll tax – FICA expense of $54,671. Accordingly, the Commission is increasing test-year expenses by $6,258.[28]

[25] Princeton's responses to Commission Staff's Third Request for Information (Staff's Third Request), Item 10.

[26] *See* Appendix A, Adjustment B.

[27] Responses to Marion District's First Request, Item 11, Exhibit 11-2, 2016 Audit at 5.

[28] *See* Appendix A, Adjustment C.

	Employee Payroll Taxes		
	Pro Forma	Reported	Adjustment
Administration	$ 19,191	$ 16,331	$ 2,860
Water Treatment Plant	15,317	13,362	1,955
Maintenance	20,163	18,720	1,443
Payroll Taxes	$ 54,671	$ 48,413	$ 6,258

Employee Insurance Benefits

In Fiscal Year 2019, Princeton paid 100 percent of the single and family health insurance premiums for its employees. Princeton also paid the single employee premiums for dental, vision and life insurance coverages. Princeton's employee benefit expense for the water division and the shared maintenance expenses for Fiscal Year 2019 was $223,492.[29]

The Commission is placing greater emphasis on evaluating employees' total compensation packages, including both salary and benefits programs for market and geographic competitiveness to ensure the development of fair, just, and reasonable rates. The Commission has found that in most cases 100 percent employer-funded healthcare does not meet those criteria. Absent a utility's requirement of reasonable employee participation in healthcare costs, the Commission has applied a consistent standard by utilizing the Bureau of Labor Statistics report,[30] which reflects an average employee

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[29]

Administration	$ 56,618
Water Treatment Plant	67,562
Maintenance	99,312
Employee Benefits	$ 223,492

[30] Bureau of Labor Statistics, Healthcare Benefits, March 2019, Table 10, private industry workers. (https://www.bls.gov/ncs/ebs/benefits/2019/ownership/private/table10a.pdf). (Last accessed June 9, 2020).

contribution to healthcare cost of 38 percent for family and 21 percent for single coverage, respectively.

The Intervenors recognized the Commission's policy of imposing an appropriate adjustment to expenses when a utility does not require reasonable employee contributions toward premium is based upon the U.S. Department of Labor, Bureau of Labor Statistics' average employer/employee contributions for health insurance coverage.[31] The Intervenors proposed adjustment to Princeton's employee health insurance expense is based on the national average for employers of 1–99 employees, which would reflect the Commission's policy of applying employee contributions of the 21 percent level for single health insurance coverage and 38 percent for family coverage.

Princeton argues that it has presented evidence in this proceeding that would allow the Commission to change its position regarding employer-paid benefits and that the Commission could limit its ruling to this case only.[32] Specifically, Princeton explained that two of its employees left employment with Princeton for higher salaries, only to return for the benefits that are provided by Princeton.[33] Princeton argues that with the aging water-utility workforce, it is becoming increasingly difficult for water utilities to attract and maintain talent.[34] Princeton argues that the benefit packages encourage employees to remain in service with a particular water utility and that the customers benefit from that expense.[35] Princeton further argues that, even if the Commission disagrees with

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[31] Caldwell District and Lyon District Post-Hearing Brief page 10.

[32] Princeton's Post-Hearing Brief page 7.

[33] *Id.*

[34] *Id.*

[35] *Id.*

Princeton's position that 100 percent of benefits should be recovered in rates, any adjustment to employee benefits should be based on the "All workers" category and not the category used by the Intervenors because if the Commission is encouraging utilities to be "market competitive" on a national level, it does not matter how many employees the employer has.[36]

The experience of two of Princeton's employees is not sufficient evidence to support Princeton's argument that paying 100 percent of its employees' health insurance coverage is reasonable. Princeton admitted that its policy of providing 100 percent family coverage health insurance is not consistent with most other private companies in its service territory.[37] Therefore, rate recovery would require Princeton's rate payers to fund an employee benefit that is not readily available to them, and is therefore unreasonable.

Accordingly, the Commission will adjust Princeton's test-year expenses for employee's health and dental insurance based on national average employee contribution rates. Using the 2020 health and dental premiums, the current staff, a 21 percent employee contribution rate for single coverage, a 34 percent contribution rate for family coverage (family, employee + spouse, and employee + child),[38] and 60 percent employee contribution rate for dental, the Commission calculates a pro forma health and dental expense of $143,467 which is $80,025 below the test-year amount.[39]

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[36] *Id.*

[37] Princeton's responses to Commission Staff's Second Request for Information (Staff's Second Request), Item 9.c.

[38] Bureau of Labor Statistics, Healthcare Benefits, March 2019, Table 10, private industry workers. (https://www.bls.gov/ncs/ebs/benefits/2019/ownership/private/table10a.pdf).

[39] *See* Appendix A, Adjustment C.

	Employee Insurance Benefits		
	Pro Forma	Reported	Adjustment
Administration	$ 47,767	$ 56,618	$ (8,851)
Water Treatment Plant	34,850	67,562	(32,712)
Maintenance	60,850	99,312	(38,462)
Insurance Benefits	$ 143,467	$ 223,492	$ (80,025)

County Employee Retirement System (CERS).

Princeton provides pension benefits and post-retirement health care benefits to its employees by participating in the CERS. As a participating member, Princeton is required to contribute a percentage of its employee wages to CERS. In the fiscal year, beginning July 1, 2019, the CERS contribution rate was 24.06 percent and in the fiscal year beginning July 1, 2020, the rate was scheduled to increase to 26.95 percent. Princeton proposed to increase its contribution to the CERS to reflect the Fiscal Year 2020 contribution rate.

Princeton acknowledged that the General Assembly had frozen the CERS contribution rate at 24.06 percent.[40] Accordingly, Princeton explained that it is appropriate to adjust pro forma expenses to reflect this lower contribution rate of 24.06 percent.

In Case No. 2016-00163,[41] the Commission discussed in great detail the reporting requirements of GASB 68 and how those requirements would impact a utility's income statement and balance sheet. In that proceeding, the Commission found that the annual pension expense should be equal to the amount of a district's contributions to CERS,

[40] Princeton Brief at 10.

[41] Case No. 2016-00163, *Alternative Rate Adjustment Filing of Marion County Water District* (Ky. PSC Nov. 10, 2016).

which historically have been "fairly constant." The CERS pension expense Princeton reported in the test year conformed to the requirements of the General Accounting Standards Board Pronouncement No. 68 (GASB 68). By using the CERS rate of 24.06 percent and the pro forma salaries and wages expense determined reasonable herein, the Commission calculates a pro forma CERS expense of $171,943 as calculated in the Table below:[42] This results in a reduction of $52,409 to the test year pension expense.

	Employee Benefits			
	Pro Forma Salaries	CERS CERS 24.06%	Less: CERS Reported	Adjustment
Administration	$ 250,866	$ 60,358	$ 73,415	$ (13,057)
Water Treatment Plant	200,217	48,172	64,787	(16,615)
Maintenance	263,564	63,413	86,150	(22,737)
Benefits	$ 714,647	$ 171,943	$ 224,352	$ (52,409)

Chemicals

Princeton proposed to increase the water division's test-year chemical expense of $81,088 by $24,618. Princeton explained that the Monthly Operating Reports submitted to the Division of Water show that the chemical usage has increased in the fiscal year.[43] These reports show the normalized chemical usage as being higher in the past years and in the present fiscal year; hence, the need to include this adjustment as a normalized "known and measurable" expense.[44] In reviewing the supporting workpapers, the Commission finds that Princeton's adjustment is reasonable and that it does meet the

[42] *See* Appendix A, Adjustment E.

[43] Princeton's Responses to Staff's Third Request, Item 3.g.

[44] *Id.*

known and measurable criteria. Accordingly, the Commission has increased the water division's chemical expense by $24,618.[45]

Sludge Removal

Princeton proposes to increase pro forma operating expenses by $28,133[46] to reflect one-half of the cost of the bi-annual lagoon cleaning. Princeton provided a copy of the H&A Resource Management Invoice dated August 26, 2019, supporting the cost incurred to clean its lagoon of $56,267. Upon review of the worksheet containing the lagoon cleaning history from Fiscal Year 2010 through 2019, the Commission has determined the cleaning fee charged by H&R Resources is reasonable. Accordingly, the Commission finds that Princeton's adjustment should be accepted.[47]

Capital Cost/Labor

In the test year, Princeton reduced the water division's operating expenses by $39,075[48] to capitalize the labor as an overhead cost of construction. Princeton proposes to reduce its capitalized labor adjustment by $34,075 to return to a claimed normal level. Princeton provided a schedule showing that between 2009 and 2019 the amount of labor costs capitalized fluctuated between $533 and $76,135. This shows that there is not a historical normalized level for capitalized labor as proposed by Princeton. Therefore, the Commission finds that Princeton's proposed adjustment should be denied. However, an

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[45] *See* Appendix A, Adjustment F.

[46] $58,267 (Cost to Clean Lagoon) ÷ 2 (Years) = $28,133.

[47] *See* Appendix A, Adjustment G.

[48] The total capital labor reported by Princeton was $55,166. The wastewater division reported $16,091 and the water division reported $39,075.

adjustment of $16,091 was made to reflect the water division's portion of capitalized labor of ($39,075).[49]

Attorney Fees

Princeton proposes to reduce its test-year attorney fees of $10,058 by $4,058 to a pro forma level of $6,000. Princeton's adjustment reflects the monthly retainer fee it currently pays to its attorney. An adjustment to reduce the attorney fees to reflect the current retainer fee meets the ratemaking criteria of known and measurable.[50] Accordingly, the Commission accepts Princeton's adjustment.[51]

Depreciation

In its November 17, 2019 tariff filling, Princeton reported test-year depreciation expense of $803,032 for the combined water and wastewater divisions and of that $511,668 was reported as depreciation expense for its water division.[52] In its pro forma Income Statement submitted on March 6, 2020, Princeton applied the depreciation lives contained in the 1979 report published by the National Association of Regulatory Utility

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[49] *See* Appendix A, Adjustment H.

[50] 807 Ky. Admin. Regs. 5:001, Section 16.1. (a).; Case No. 2001-00211, *The Application of Hardin County Water District No. 1 for (1) Issuance of Certificate of Public Convenience and Necessity; (2) Authorization to Borrow Funds and to Issue its Evidence of Indebtedness therefor; (3) Authority to Adjust Rates; and (4) Approval to Revise and Adjust Tariff* (Ky. PSC March 1, 2002); Case No. 2002-00105, *Application of Northern Kentucky Water District for (A) an Adjustment of Rates; (B) a Certificate of Public Convenience and Necessity for Improvements to Water Facilities if Necessary*; and *(C) Issuance of Bonds* (Ky. PSC June 25, 2003);Case No. 2017-00417, *Electronic Proposed Adjustment of the Wholesale Water Service Rates of Lebanon Water Works* (Ky. PSC July 12, 2018); and Case No. 2019-00080, Electronic Proposed Adjustment of the Wholesale Water Service Rates of the City of Pikeville to Mountain Water District (Ky. PSC Dec. 19, 2019).

[51] *See* Appendix A, Adjustment J.

[52] *Id.*

Commissioners (NARUC) titled Depreciation Practices for Small Water Utilities (NARUC Study). In this filing, Princeton calculated a test-year depreciation expense of $399,316.

To evaluate the reasonableness of the depreciation practices of small water utilities, the Commission has historically relied upon the report published in the 1979 NARUC Study.[53] When no evidence exists to support a specific life that is inside or outside the NARUC ranges, the Commission has historically used the mid-point of the NARUC ranges to depreciate utility plant.

In its post-hearing brief, Princeton claims that the proposal set forth by the expert for Caldwell District and Lyon District, Mr. Vilines, is not accurate. Princeton notes that Mr. Vilines made more than 30 adjustments to the service lives of Princeton's assets and Princeton will accept them, with two exceptions. Princeton claims the service life for Skyline Tank Repairs and Soft Costs should be 15 years and the amended analysis would be an increase of $13,401.65.[54] Princeton supports this claim by stating that Mr. Vilines admitted he was not aware of the costs for the project and testified that he would likely recommend a different service life.[55] Princeton also claims that Mr. Vilines should have categorized the class of assets labeled "Water Distribution Improvements" as "Water Treatment Equipment" to provide for a 27.5 year of service life under the NARUC guidelines. Princeton states that amended analysis would be an increase of $8,144.68.[56]

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[53] Case No. 2017-00417, *Electronic Proposed Adjustment of the Wholesale Water Service Rates of Lebanon Water Works* (Ky. PSC July 12, 2018); Case No. 2018-00208, *Electronic Application of Water Service Corporation of Kentucky for a General Adjustment in Existing* Rates (Ky. PSC Feb. 11, 2019; and Case No. 2019-00080, *Electronic Proposed Adjustment of The Wholesale Water Service Rates of The City of Pikeville to Mountain Water District* (Ky. PSC Dec. 19, 2019)

[54] Princeton Post-Hearing Brief at 4–5 (May 22, 2020).

[55] May 5, 2020 H.V.T, Vilines, 15:37:30; 6:55:00.

[56] Princeton Post-Hearing Brief at 5 (May 22, 2020).

Upon review of the Skyline Tank Repairs and Soft Costs, the Commission notes that these costs represent nonrecurring maintenance costs. In reviewing Princeton's proposed 15-year amortization of its nonrecurring maintenance costs, the Commission finds that the proposed period is reasonable. Princeton has not presented any supporting analysis or study to show that its original depreciation lives are appropriate. The Commission, therefore, calculates a test-year depreciation expense for the water division of $403,744 to reflect depreciating all of Princeton's water utility plant, including post-test-year plant, over the NARUC depreciation lives and the nonrecurring costs over 15 years and reduces the combined depreciation expense of $803,032 by $399,288.[57]

Revenue and Expense Allocations

Princeton recorded numerous shared revenues and expenses incurred to operate its water and wastewater divisions. Shared revenues are allocated between the two divisions based on reported revenues. It currently allocates the salaries and benefits paid to its Superintendent and Director of Finance evenly between the two divisions. All other operating expenses classified by Princeton as administrative are recovered through the water and wastewater customer service charges.

Princeton originally explained that its maintenance department expenses were randomly allocated with 45 percent allocated to the water division and the remaining 55 percent allocated to the wastewater division. Princeton's random maintenance department allocation rates were established in 2010 when the first worksheet on unit cost of production was attempted.[58] Princeton explains that while it is not able to

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[57] *See* Appendix A, Adjustment J.

[58] May 5, 2020 H.V.T, Musgove, 13:16:06-13:18:00.

document the actual time each maintenance employee spends between departments, a review of the inventory records and work orders by departments show a majority of maintenance department time is actually water related instead of sewer.

Princeton did not produce a time analysis or study to support any of the allocation methods currently in use. Given the absence of a supporting study or analysis, the Commission has found in prior proceedings a more equitable method to allocate the shared costs between two divisions is to use a factor based on the number of customers that are served by each division (Customer Allocation Factor).[59] Using the customers that are served by each division in Fiscal Year 2019, the Commission has determined that 54.05 percent of the shared revenues and expenses should be allocated to the water division and the balance to the wastewater division.[60]

The table below is the allocation of the shared revenues between Princeton's water and wastewater divisions. [61]

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[59] *See, e.g.* Case No. 2012-00309, *Application of Southern Water and Sewer District for an Adjustment in Rates Pursuant to the Alternative Rate Filing Procedure for Small Utilities* (Ky. PSC: Staff Report issued Feb. 15, 2013; Final Order issued July 12, 2013); Case No. 2013-00350, *Alternative Rate Adjustment Filing Garrison-Quincy-Ky-O-Heights Water District* (Ky. PSC: Staff Report issued Jan. 17, 2014; Final Order issued Feb 19, 2014); Case No. 2017-00074, *Application of Western Lewis Rectorville Water and Gas District for Rate Adjustment for Small Utilities Pursuant to 807 KAR 5:076* (Ky. PSC: Staff Report issued July 17, 2017; Final Order issued Oct. 18, 2017); Case No. 2017-00371, *Application of Symsonia Water and Sewer District for Rate Adjustment Pursuant to 807 KAR 5:076* (Ky. PSC: Staff Report issued Jan. 3, 2018; Final Order issued Mar. 30, 2018); and Case No. 2018-00117, *Application of Ledbetter Water District for an Alternative Rate Adjustment* (Ky. PSC: Staff Report issued July 16, 2018; Final Order issued Sep. 10, 2018).

[60] 3,386 (Water Customers) ÷ 6,264 (Total Water and Wastewater) = 54.05%.

[61] The adjusted column in the revenue and expense schedules reflects Princeton's actual test year revenues and expenses adjusted to reflect the pro forma adjustments that the Commission has found reasonable herein.

Account No.	Description	Adjusted	-45.95% Wastewater Allocation	54.05% Water Allocation
4020	Penalty Income	58,701	(26,973)	31,728
4030	Sale of Stores	11,661	(5,358)	6,303
4040	Labor Sales	6,200	(2,849)	3,351
4046	Bank Customer ACH	1,403	(645)	758
4050	Equipment Rental	4,428	(2,035)	2,393
4080	Service Charge & Connection Fees	20,575	(9,454)	11,121
4087	Recovery of Bad Debt	(2,745)	1,261	(1,484)
4095	Pmt Plan Misc Invoices	2,297	(1,055)	1,242
	Total Operating Revenues	102,520	(47,108)	55,412

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The table below is the allocation of the shared expenses between Princeton's water and wastewater divisions.

Account No.	Description	Adjusted	-45.95% Wastewater Allocation	54.05% Water Allocation
Administration				
100-6010	Salaries	250,866	(115,273)	135,593
100-6020	Payroll Tax	19,191	(8,818)	10,373
100-6030	Employee Benefits	47,767	(21,949)	25,818
100-6040	Uniforms	940	(432)	508
100-6050	Training Expense	7,323	(3,365)	3,958
100-6060	CERS/Pension/OPEB	60,358	(27,735)	32,623
100-6070	Utilities	8,063	(3,705)	4,358
100-6080	Gas and Oil	169	(78)	91
100-6090	Equipment Repair	2,376	(1,092)	1,284
100-6100	Supplies	6,882	(3,162)	3,720
100-6110	Insurance	4,278	(1,966)	2,312
100-6121	Professional Services	3,085	(1,418)	1,667
100-6122	Data Processing	10,270	(4,719)	5,551
100-6130	Miscellaneous Expense	3,822	(1,756)	2,066
100-6135	Postage	11,268	(5,178)	6,090
100-6160	Tools & Small Equipment	4,562	(2,096)	2,466
100-6180	Building Repair & Maintenance	3,518	(1,617)	1,901
	Administrative Expenses	444,738	(204,359)	240,379
Maintenance				
400-6010	Salaries	263,235	(120,956)	142,279
400-6020	Payroll Tax	20,137	(9,253)	10,884
400-6030	Employee Benefits	60,850	(27,961)	32,889
400-6040	Uniforms	2,711	(1,246)	1,465
400-6050	Training Expense	990	(455)	535
400-6060	CERS/Pension/OPEB	63,334	(29,102)	34,232
400-6070	Utilities	13,940	(6,405)	7,535
400-6080	Gas and Oil	14,745	(6,775)	7,970
400-6090	Equipment Repair	8,895	(4,087)	4,808
400-6100	Supplies	5,104	(2,345)	2,759
400-6105	Chemicals	40,481	(40,481)	-
400-6110	Insurance	19,348	(8,890)	10,458
400-6121	Professional Services	1,493	(686)	807
400-6130	Miscellaneous Expense	2,183	(1,003)	1,180
400-6135	Postage	154	(71)	83
400-6140	Rental and Lease	667	(306)	361
400-6160	Tools & Small Equipment	10,544	(4,845)	5,699
400-6180	Building Repair & Maintenance	1,219	(560)	659
400-6650	Inventory Expense	21,119	(9,704)	11,415
400-6660	Misc. Material Ex	29,460	(13,537)	15,923
400-6665	Freight Expense	74	(34)	40
400-6670	Capital Cost/Labor	(39,075)	17,955	(16,091)
	Maintenance Expenses	541,608	(270,747)	275,890
Unallocated Commission				
500-6010	Salaries (Commissioners)	9,000	(4,136)	4,864
500-6110	Insurance	4,971	(2,284)	2,687
500-6150	Attorney Fees	6,000	(2,757)	3,243
	Commission Expenses	19,971	(9,177)	10,794

Forecasted Expenses

Princeton proposed adjustments to employee salaries and to employee benefits to reflect projected Fiscal Year 2021 hourly wages and insurance premiums. Not only does the Fiscal Year begin 24 months after the close of the test-year but Princeton claims that its proposed adjustments are the result of the Fiscal Year 2021 budget process.[62] The Commission has traditionally limited how far outside the test year it will allow post-test-year expense adjustments, especially if such adjustments are made in isolation from similar adjustments to revenues, rate base and capitalization[63] and are based upon budgetary projections that are not known and measurable.[64] Accordingly, the Commission finds that Princeton's proposed adjustments to reflect forecasted 2021 wages and health insurance premiums should be denied.

Summary Impact of Adjustments

After considering the test-year operating revenues and expenses, including appropriate adjustments found reasonable herein, the Commission has determined that the financial results of Princeton's pro forma test-year operations are as follows:[65]

	Test-Year Actual	Pro Forma Adjustments	Allocation Adjustments	Pro Forma Operations
Operating Revenues	$ 1,821,377	$ (36,120)	$ (47,866)	$ 1,737,391
Operating Expenses	2,528,113	(396,249)	(502,437)	1,629,427
Net Operating Income	$ (706,736)	$ 360,129	$ 454,571	$ 107,964

[62] Princeton's Responses to Commission Staff's Third Request for Information, Item 10.a.

[63] Case No. 94-336, *Application of East Kentucky Power Cooperative, Inc. to Adjust Electric Rates* (Ky. PSC July 25, 1995) at 3–2.

[64] *Supra* fn. 50.

[65] *See* Appendix A for a detailed summary of this table.

OVERALL REVENUE REQUIREMENT AND REQUIRED REVENUE INCREASE

The Commission has historically applied a debt service coverage (DSC) method to calculate the Overall Revenue Requirement of water districts, water associations, and municipal-owned water utilities. This method allows for recovery of (1) cash-related pro forma operating expenses; (2) recovery of depreciation expense, a noncash item, to provide working capital; (3) the average annual principal and interest payments on all long-term debts; and (4) working capital that is in addition to depreciation expense.

A comparison of Princeton's and the Commission's calculation of the Overall Revenue Requirement and Required Revenue Increase using the DSC method is shown below:

	Princeton	Commission
Pro Forma Operation & Maintenance Expenses	$ 1,179,482	$ 1,225,683
Pro Forma Depreciation	399,316	403,744
Pro Forma Operating Expenses	1,578,798	1,629,427
PLUS: Avg Annual Debt Principal and Interest Payments	176,065	147,130
PLUS: Debt Coverage Requirement	35,213	29,426
Total Revenue Requirements	1,790,076	1,805,983
LESS: Other Operating Revenue	(51,168)	(54,654)
Revenue Required from Rates	1,738,907	1,751,329
LESS: Normalized Revenues from Sales	(1,520,209)	(1,682,737)
Required Revenue Increase/(Decrease)	$ 218,698	$ 68,592
Percentage Increase	14.4%	4.1%

Average Annual Principal and Interest Payments

At the close of Fiscal Year 2019, Princeton reported the following outstanding debt issuances: (1) Kentucky Association of Counties Series 2018-C (KACo Series 2018C); and (2) United States Department of Agriculture (USDA) Revenue Series 2019 Bonds (Series 2019 Bonds).[66] The debt issuances are discussed in more detail below.

KACo Series 2018C. Princeton explained that the purpose of this debt issuance was to refinance the remaining balance of the Rural Development Series 2000 bond issuance in an effort to lower interest rates. The proceeds from the original bonds were used by Princeton to upgrade the water treatment plant from 2.0 MGD to 3.0 MGD to ensure a continued reliable water supply.

Given the original purpose of the 2000 debt issuance was to upgrade the water treatment plant used by Princeton to provide wholesale water service to Caldwell District and to Lyon District, the Commission finds that 100 percent of the debt service for the KACo Series 2018C Bonds should be recovered from the retail and wholesale water customers assigned to the inside-the-city water system. The following is the amortization schedule for the KACo Series 2018C loan.

	KACo Series 2018C Debt Service
2021	$ 72,407
2022	$ 75,532
2023	$ 73,532
Avg.	$ 73,824

[66] Princeton's responses to the Commission's January 10, 2020 Order, Item 6.c.

USDA Series 2019 Bonds. Princeton explained that it used the proceeds from this issuance to construct a new 16-inch transmission line to feed the Industrial Park Tank, to rehabilitate the Skyline Tank, and to switch over the service on the Sandlick Road around the UK Experiment Station to the high-level system and improve water quality and water pressure. According to Princeton the 8-inch water line improvements around the UK Experiment Station did not impact or improve its ability to serve its wholesale customers.

Upon review of the Engineering Report[67] provided by Princeton, the Commission finds, as shown in the calculation in Appendix B, that only 72.17 percent of the USDA Series 2019 Bonds debt service should be included in the revenue requirement calculation. The following schedule is the comparison of the three-year average debt service calculation for the total and allocated debt service for the Series 2016A Bonds.

	USDA Series 2019 Bonds Debt Service	Allocation
2021	$ 100,747	$ 73,257
2022	$ 100,822	$ 73,312
2023	$ 100,876	$ 73,351
Avg.	$ 100,815	$ 73,307

Three-Year Average Debt Service. The schedule below is the calculation of the three-year average debt service the Commission used in its revenue requirement determination.

[67] Princeton's Responses to Staff's Second Request, Item 8.b.

	KACo Series 2018C Debt Service	USDA Series 2019 Bonds Debt Service	Total
2021	$ 72,407	$ 73,257	$ 145,664
2022	$ 75,532	$ 73,312	$ 148,844
2023	$ 73,532	$ 73,351	$ 146,883
Avg.	$ 73,824	$ 73,307	$ 147,131

RATE DESIGN

Princeton's current wholesale rate design is a two-part rate design consisting of a meter charge applied to each meter per month and a volumetric rate applied to monthly customer usage. Princeton proposed to increase its monthly meter charge from $4.00 per meter to $6.00 per meter, a 50.00 percent increase, and proposed to increase its volumetric charge from $2.2871 per 100 cubic feet to $2.97 per 100 cubic feet, a 29.86 percent increase.

Princeton's Director of Finance developed the "unit cost approach" in-house. Ms. Musgove testified that the "unit cost approach" was used in place of a COSS to determine the rates proposed by Princeton.[68] Princeton did not perform a COSS, and Ms. Musgove admitted at the hearing that she wished that a COSS had been performed.[69] Ms. Musgove explained the approach in her testimony and responses to information requests.

> Cost accounting is used in manufacturing entities to derive the "unit cost" of particular products by adding all direct and indirect labor and material costs and then dividing by the total number of units produced. Hence, this same approach was utilized to find out the "unit cost" of the products produced and sold by PWWC, water and wastewater disposal.[70]

[68] May 5, 2020 H.V.T., Musgove, 9:43:00.

[69] May 5, 2020 H.V.T, Musgove, 9:58:00.

[70] Princeton Response to Commission Staff's Second Request for information, Item 17.

Ms. Musgove states that the proposed $2.97 per 100 cubic feet rate is the same rate that Princeton's largest retail customers pay.[71]

Caldwell District and Lyon District argue that Princeton's proposed unit cost approach is inappropriate and inaccurate. They contend that the approach fails to make proper adjustment to expenses, fails to fairly allocate costs, and is too simplistic. Caldwell District and Lyon District objected to Ms. Musgove's qualifications as an expert in applying the methodology.[72] Princeton believes that with several appropriate adjustments to Mr. Vilines's analysis the result is a volumetric wholesale rate of $3.03 per 100 cubic feet.[73] Princeton claims this supports the reasonableness of the method and rate presented by Princeton.[74]

The Commission finds Princeton's unit cost approach could be used to design rates if all of the system customers' usage was approximately the same; however, wholesale customers' usage volume and pattern differ from retail customers. Wholesale rates should be established on the basis of the costs required to provide the wholesale water service. Given the lack of supporting evidence, the Commission finds that Princeton has failed to meet its burden of proof that the unit cost approach produces a fair, just, and reasonable wholesale water rate, and therefore, Princeton's proposed unit cost approach and the wholesale rates produced by it should be rejected.

COSS

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[71] Direct Testimony of Tracy B. Musgove at 6, line 9–12.

[72] Caldwell District and Lyon District Post-Hearing Brief at 7–8 (May 22, 2020).

[73] Princeton Post-Hearing Brief at 1.

[74] Princeton Post-Hearing Brief at 3.

Princeton did not file a COSS with its application; however, Caldwell District and Lyon District filed a COSS prepared by Mr. Vilines.[75] Mr. Vilines' COSS utilizes what is referred to as the "inch-mile" methodology to allocate the expenses associated with the production of water and allows for an equitable manner of the allocation of these expenses to calculate a wholesale rate based upon information available.

Princeton does not question the use of this allocation method nor the COSS filed, but Princeton did take exception to the total jointly used miles of main that Mr. Vilines used in his study. Princeton argues that the 362.56 jointly used inch-miles of main used by Mr. Vilines in his analysis is not accurate. Princeton states that Mr. Vilines is not familiar with Princeton's system and he did not communicate with Princeton personnel, nor the engineering firm employed by Princeton to determine a proper level of jointly used inch miles.[76] Princeton further argues that the 496.30 jointly used inch-miles of main calculated by the engineering firm of Heathcoat & Davis is more accurate to determine the amount of miles of main used to provide service to the wholesale customers.[77]

Princeton did not challenge the amount of miles of mains that Mr. Vilines utilized in his study until the filing of Princeton's brief. Prior to filing its brief, Princeton, neither during discovery nor at the Formal Hearing challenge nor cross-examine, challenged how Mr. Vilines calculated 362.56 miles of mains. Princeton provided an update to Mr. Vilines' study. In this revised study, Princeton inputted 496.30 as the jointly used inch-miles and made adjustments, but did not provide an explanation for each of the adjustments to

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[75] Caldwell District and Lyon District's Response to Commission Staff's Second Request for information, Item 3.

[76] Princeton Post-Hearing Brief at 12.

[77] *Id.*

jointly used miles of lines it made.[78] Princeton only provided an Excel file with its calculations used to determine the 496.30 jointly used inch-miles and cited to data that would be used to calculate the amount of jointly used inch-miles.[79]

The Commission has ruled in previous cases that the costs associated with mains that do not benefit the wholesale customer should not be included in the wholesale rate.[80] The COSS update provided by Princeton is not supported, Princeton did not provide direct testimony from its engineering firm Hethcoat & Davis, nor did Princeton present a witness at the hearing. The Commission also notes that neither the parties nor the Commission itself had sufficient opportunity to fully explore the revised COSS. Therefore, the Commission finds that Mr. Vilines's calculation of the jointly used inch-miles is the most accurate cost estimate and is more appropriate for determining the wholesale rate for Princeton as the analysis provides a traditional method previously accepted by the Commission in determining wholesale water rates. The rates set forth in Appendix C are based upon the revenue requirement of $1,805,983, as calculated by the Commission, and applied to the allocation method as presented by Mr. Vilines.

Customer Charge

A customer charge is used to recover the fixed expenses of the system without regard to the amount of the water consumed. Princeton's proposed monthly customer

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[78] *Id.*

[79] *Id.*

[80] See Case No. 2002-00105, *Application Of Northern Kentucky Water District For (A) An Adjustment Of Rates; (B) A Certificate Of Public Convenience And Necessity For Improvements To Water Facilities If Necessary; And (C) Issuance Of Bonds* (Apr. 30, 2003) at 25-26.; Case No. 2002-00022, *Proposed Adjustment of the Wholesale Water Service Rates of the City of Pikeville, Kentucky* (Oct. 18, 2002) at 35.

charge was determined by totaling the fixed expenses, as determined by Princeton, dividing that amount by the total number of meters in the system for an annual amount and then dividing that by 12 months. Caldwell District and Lyon District argued that Princeton's proposed 50 percent increase to the customer charge is not supported and that the allocated wholesale portion of administrative costs should be included in the volumetric rate.[81] Mr. Vilines states that pro forma expenses should be allocated to four categories: water production, transmission and distribution, customer accounts, and administrative. Mr. Vilines argues that the activities of the administration and maintenance groups are related solely to retail customers and facilities serving retail customers, and these expenses should be allocated to the customer accounts category and not shared by wholesale customers.[82] Mr. Vilines argues that the wholesale portion of the administrative expenses are more appropriately recovered through wholesale volumetric rate as opposed to Princeton's proposed customer charge.[83]

According to the American Water Works Association's (AWWA) *Manual of Water Practices, Principles of Water Rates, Fees, and Charges* (AWWA M1 Manual):

> Wholesale rates should be designed to recover costs of providing service based on usage, pattern of usage, and level of service of individual wholesale class members. Often in developing a rate design to recover the cost of providing wholesale service, customer-related costs are a small percentage of the total cost of service. Rather than use a wholesale service charge, some utilities recover customer related costs through the commodity, or volume charge.[84]

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[81] Caldwell District's and Lyon District's Post-Hearing Brief at 15.

[82] Vilines direct testimony at 3, line 19–23.

[83] Vilines direct testimony at 4, line 4–6.

[84] AWWA M1 Manual at 236.

Therefore, based upon the AWWA M1 Manual criteria, the Commission finds that Princeton's proposed customer-related costs should be recovered through the volumetric rate. Furthermore, unlike most wholesale water suppliers that own the master meters, Caldwell District owns the nine master meters that Princeton uses to supply water to the Caldwell District.[85] Caldwell District is therefore responsible for the costs of maintenance, testing, and replacement of the meters and such costs should be excluded from Princeton's cost calculations.

The Commission notes that Princeton, Caldwell District, and Lyon District have invested significant resources litigating the case. Princeton argues it did not choose to perform a COSS due to the expense.[86] The investment in a COSS performed by a reputable independent entity could have provided both parties assurance that the rates were formulated in accordance with the Commission's previously accepted ratemaking principles. The high cost of legal fees and the number of resources that were spent on supporting the proposed adjustment may have been avoided if Princeton had at least properly researched and supported the proposed adjustment before attempting to apply for the rate increase and attempted to negotiate with Caldwell District and Lyon District as they requested prior to the matter being litigated at the Commission.

RATE CASE EXPENSES

A utility may properly recover reasonable rate case expenses as a cost of doing business.[87] The Commission has generally permitted rate recovery of a reasonable level

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[85] Princeton's response to Staff's First Request for Information, Item 18.c.

[86] May 5, 2020 H.V.T, Musgove, 9:58:00.

[87] *See Driscoll v. Edison Light & Power Co.*, 307 U.S. 104, 120 (1939).

of rate case expenses but has disallowed such expenses when a utility has failed to provide adequate documentary evidence of the incurrence of the expense.[88] The Commission has also disallowed such expenses as unreasonable when related to a poorly or improperly prepared rate application[89] and in cases in which the utility failed to justify the high level of expenses for relatively simple alternative rate filings.[90]

In its November 27, 2019 tariff filing, Princeton proposed a rate case expense surcharge mechanism. The filing proposed to assess a surcharge over 36 months to recover any rate case expenses it may incur to participate in and defend its proposed rates. In the tariff filing, Princeton used rate case expenses totaling $99,000 as demonstrative of its proposed methodology.

In Case No. 2009-00373, *Proposed Adjustment of the Wholesale Service Rates of Hopkinsville Water Environment Authority*, the Commission analyzed whether the special counsel fees were part of reasonable rate case expenses and capped the rate case expense.[91] The Commission evaluates the prudence of rate case expense on a case by case basis.[92] In Case No. 2009-00373, the Commission allocated the cost of performing a COSS because it related to all the customers and reduced the special counsel fees that

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[88] Case No. 2008-00250, *Proposed Adjustment of the Wholesale Water Service Rates of Frankfort Electric and Water Plant Board* (Ky. PSC Apr. 6, 2009).

[89] Case No. 8783, *Application of Third Street Sanitation, Inc. for an Adjustment of Rates Pursuant to the Alternative Procedural for Small Utilities* (Ky. PSC Nov. 14, 1983).

[90] Case No. 9127, *Application of Sargent and Sturgeon Builders, Inc., Gardenside Subdivision Sewer Division, for a Rate Adjustment Pursuant to the Alternative Rate Filing for Small Utilities* (Ky. PSC Mar. 25, 1985).

[91] Case No.2009-00373, *Proposed Adjustment of the Wholesale service Rates of Hopkinsville Water environment Authority* (Ky. PSC July 2, 2010).

[92] *Id.* at 5–6.

were related to the COSS because it was performed after the application and not used to develop the proposed rates at issue. The high level of rate case expense compared to the complexity of the issues and the level of rate case expenses for similar cases were factors the Commission reviewed in finding that Hopkinsville's expense related to special counsel fees should be capped at $50,000.[93]

Princeton provided copies of itemized invoices from its attorney and engineer showing that actual costs incurred in conjunction with this rate case are $103,824.[94] However, the schedule provided to support the time Princeton's Director of Finance devoted to the rate case lacks sufficient detail. The schedule lists general meetings between the Director of Finance and "Bob" or a prehearing conference.[95]

To justify recovery of the Director of Finance's salary through the rate case surcharge Princeton explained that:

> The Director of Finance had made plans to retire as of December 31, 2019. Another administrative position was made available and the position was filled in November. Therefore, the Director of Finance's total wages and employer paid benefits from January through mid-June are applicable to the rate case and should be reimbursed.

However, as previously noted in a response to a Post-Hearing Data Request, Princeton explained that Tracy Musgove is currently employed by Princeton as the Director of Finance and Special Projects. She is considered a "fulltime" employee as defined in the employee handbook.[96]

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[93] *Id.* at 9–13.

[94] Princeton's PWWC Monthly Supplement to 2–3 (May 15, 2020).

[95] *Id.*

[96] Princeton's Responses to Commission Staff's Post Hearing Data Request, Item 1.

Given that Ms. Musgove is a full-time employee of Princeton, the Commission has included her full salary in Princeton's pro forma operating expenses. Allowing Princeton to now recover any portion of Ms. Musgove's salary through the rate case surcharge would result in double recovery. Therefore, the Commission finds that the salary of the Director of Finance should not be recovered by Princeton through the rate case surcharge. The Commission also finds that Princeton's conduct attributed to the excessive rate case expense. Specifically, the Commission finds that Princeton bears responsibility for rejecting reasonable attempts at negotiation[97] and misleading the Commission about negotiations by misrepresenting the facts.[98] The "unit cost approach" is rejected as a flawed method for calculating wholesale water rates. Princeton was presented with researched, supported counter proposals, and either obstinacy or incompetency prevented Princeton from making any reasonable concessions during the pendency of this action.[99] Princeton's actions delayed a resolution, increasing litigation costs and preventing any mitigation of expense. Assessing the full rate case expense against Caldwell District and Lyon District alone is not justified or reasonable. Princeton, because of its actions, should be responsible for its share of the expense.

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[97] May 5, 2020, H.V.T. Musgove, at 14:15:02 stating the water districts had no follow-up to the October meeting; 14:15:33 stating the Intervenors had no follow-up; 14:16:11 stating she had been told the water districts were going forward with the protest and there was no reason to negotiate; 14:16:42 stating the Intervenors were "half-hearted" but no support for how Musgove knew the attempt to negotiate in the letters were a "half-hearted" attempt; Noel, at 14:51:30.

[98] *Id.* Musgove, at 14:15:02-14:21:00.

[99] May 5, 2020 H.V.T, Musgove, 9:58:00; 13:54:55-13:55:24; 13:54:44; and 13:56:45 stating that she recognizes some changes she could make; 13:57:09 stating that she was not aware of NARUC recommended depreciation calculations or analysis; 13:57:18 stating that she has "better numbers" now; 13:57:26 stating that "knowing now, what I know" she would make changes to the proposed rate.

Eliminating the Director of Finances salary from the requested rate case expense results in an allowable level of $75,259.[100] However, the allowable rate case expense should be recovered equally from Princeton and Princeton's wholesale water customers, which results in a disallowance of a third of the rate case expense. The monthly rate expense surcharge is $697 per month as calculated in the table below:

Attorney	$	64,541
Engineering		10,718
Allowable Rate Case Expense		75,259
Divided by Amortization Period		36
Monthly Rate case Surcharge		2,091
Divided by Participants		3
Monthly Surcharge	$	697

MERGER

During the May 5, 2020 hearing, Ms. Musgove testified that the benefits of merger between Princeton and the Intervenors should be explored to realize the savings that could take place by eliminating the duplicity of positions or costs.[101] James Noel, Superintendent of Princeton, testified that there have not been conflicts in the past; however, recently there was an issue with reading county meters between Princeton and Caldwell District.[102] At the hearing, Vice Chairman, Cicero, discussed the possibility of

[100] $64,541 (Attorney Fees) + $10,718 (Engineering) = $75,259.

[101] May 5, 2020 H.V.T, Musgove, 13:57:50-13:59:05.

[102] May 5, 2020 H.V.T, Noel, 14:51:30-14:52:52.

merger with Jimmy Littlefield, CEO of Caldwell County, and despite admitting that trust issues exist between Caldwell District and Princeton, he agreed to consider merger.[103]

Caldwell District provides water service to approximately 2,100 retail customers.[104] In Case No. 2019-00311, the Commission noted Caldwell District reported a water loss of 12.7 percent in its 2018 Annual Report.[105] Moving 5.4 million gallons of water attributed to unverified sabotage[106] from the category Other Water Used - to the category Water Loss - Other, increases Caldwell District's water loss to 18.2 percent.[107]

Lyon District provides water service to approximately 2,600 retail customers and reports 16.4 percent water loss.[108] Commission records show that Lyon District has not had a base rate case since 1986.[109] The Commission has been placing greater emphasis

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[103] May 5, 2020 H.V.T., Littlefield, 16:15:00.

[104] *Annual Report of Caldwell County Water District to the Public Service Commission for the Calendar Year Ended December 31, 2018* at 12 and 49, Caldwell County Water District and Lyon County Water District's Joint Post-Hearing Brief, p 2 (filed May 22, 2020), and *Annual Report of Lyon County Water District to the Public Service Commission for the Calendar Year Ended December 31, 2018* at 12 and 49.

[105] Annual Report of Caldwell County Water District to the Public Service Commission of the Commonwealth of Kentucky for the Calendar year Ended December 31, 2018 (2018 Annual Report) at 56.

[106] Caldwell District explained that the water reported as sabotage is not being "stolen," but rather fire hydrants that have been opened in various locations in its distribution system. Given that the water is not being used either by Caldwell District, a wastewater treatment facility, or by a fire department, the water lost by Caldwell District due to the claimed sabotage should be recorded in the category "Water Loss - Other."

[107] Case No. 2019-00311, *Application of Caldwell County Water District for Approval to Enter into a Lease Agreement with the Kentucky Association of Counties Leasing Trust for an Approximate Principal Amount of $1,710,000 for the Purpose of Refinancing Outstanding Obligations* (Ky. PSC Oct. 30, 2019).

[108] *Annual Report of Lyon County Water District to the Public Service Commission for the Calendar Year Ended December 31, 2018* at 57.

[109] Case No. 9524, *The Application of Lyon County Water District, Lyon County Kentucky for (1) a Certificate of Public Convenience and Necessity Authorizing Said District to Construct Major Improvements and Extensions to Its Existing Municipal Water Distribution System Pursuant to Provisions of Chapter 74 of the Kentucky Revised Statutes; (2) Seeking Approval of the Issuance of Certain Securities; (3) for an Adjustment of Rates, and (4) Approval to Purchase Lake Barkley Water System, Inc.* (Ky. PSC July 11, 1986).

on monitoring utilities that consistently exceed the 15 percent unaccounted-for water loss threshold and has strongly encouraged Caldwell District to pursue reasonable actions to reduce its unaccounted-for water loss. Lyon District is strongly encouraged to make significant progress towards reducing its unaccounted-for water loss. Merger between some or all of the utilities involved in this matter may offer some financial support for the operations and water loss goals of the utilities involved.

The Commission also notes that its records indicate that Lyon District has not sought a general adjustment in base rates by any other means than through a financing approval or in conjunction with an application for a Certificate of Public Convenience and Necessity since 2003. While Lyon District has increased its rates as part of financing cases through the United States Department of Agriculture Rural Development (RD), the Commission's review of records in a RD financing case is limited and very different from the comprehensive review of a utility's total financial stability and operational viability that takes place in a traditional rate adjustment case or an alternative rate adjustment. The Commission recently noted that utilities use this practice intentionally to avoid a review of its financial records.[110] Some of the key general recommendations that resulted from the investigation of Commission Case No. 2019-00041 were that water utilities with sustained excessive water loss should, in general, apply for base rate adjustments on a more frequent basis, consider sharing resources, professional consultants, and consider merger.[111] Both Intervenors have water loss in excess of 15 percent. The lack of insight

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[110] *See* Case No. 2019-00041, *Electronic Investigation into Excessive Water Loss by Kentucky's Jurisdictional Water Utilities* (Ky. PSC. Nov. 22, 2019).

[111] *Id.*

into the Intervenors' financial records, coupled with sustained water loss above the 15% threshold, indicates to the Commission that the Intervenors should each file an application for a traditional adjustment in rates or an alternative rate adjustment within one year of the date of filing of this Order to ensure their respective financial situations are sufficient to combat excessive water loss.

Acknowledging the known difficulties presented when municipalities merge with a jurisdictional utility, the Intervenors should consider merging with Princeton, if not in total, the utilities should consider sharing resources, positions, professional consultants or equipment costs. The utilities have established relationships, and the ratepayers should be aware of the cost savings possible if the utilities work together. At the very least, the boards of Princeton and the Intervenors should review the possibilities of merger as part of a larger inquiry. Ms. Musgove testified that she felt Caldwell's attempt to negotiate was "half-hearted," and Princeton did nothing to pursue further negotiation. She also stated that she "heard" there was no reason to negotiate.[112] Mr. Littlefield testified that he did not feel he could trust Princeton because of the "dishonesty" involved in communications over the master meter ownership and maintenance.[113] The larger benefits of merging could outweigh disagreements over one issue or those conflicts that prove to be related to certain individuals. Despite disagreements over the master meter, Mr. Littlefield agreed he would not rule out the possibility of merger in the future.[114] Merging one or both of the

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[112] May 5, 2020 H.VT., Musgove, 14:16:42–14:19:57.

[113] May 5, 2020, Littlefield, 16:13:15-16:14:06.

[114] *Id.* at 16:14:15-16:15:15.

Intervenors with Princeton may provide solutions to water loss issues and provide significant savings for the ratepayers.

After consideration of the evidence of record and being sufficiently advised, the Commission finds that:

1. The rates proposed by Princeton would produce revenues in excess of the amount found reasonable herein and should be denied.

2. Princeton should be permitted to recover $75,259 for rate case expenses related to engineering and legal fees.

3. The rates set forth in the Appendix B to this Order are fair, just, and reasonable and should be approved for the provision of wholesale water service to Princeton for services rendered on and after June 15, 2020.

4. Princeton District should be authorized to assess a monthly surcharge of $697 per month to each wholesale water customer for a period of 36 months to recover $75,259 for rate case expenses.

5. Princeton should file a revised tariff setting out these rates as approved and remove language pertaining to the possibility of a refund if a lower rate is determined from its tariff.

IT IS THEREFORE ORDERED that:

1. The wholesale rates proposed by Princeton are denied.

2. The rates and charges found reasonable herein and set forth in Appendix B and C to this Order are approved for the provision of wholesale water service rendered by Princeton on and after June 15, 2020.

3. Within 20 days of the date of this Order, Princeton shall file with this Commission, using the Commission's electronic Tariff Filling System, revised tariff sheets setting out the rates approved herein and reflecting that they were approved pursuant to this Order.

4. Any documents filed pursuant to ordering paragraph 3 of this Order shall reference the case number of this matter and shall be retained in the post-case correspondence files.

5. Caldwell District and Lyon District shall file for an adjustment in base rates or file for an alternative rate filing within one year of the date of filing of this Order to ensure that their rates are sufficient.

6. This case is closed and removed from the Commission's docket.

By the Commission

ENTERED

JUN 15 2020 rcs

KENTUCKY PUBLIC
SERVICE COMMISSION

ATTEST:

Executive Director

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2019-00444 DATED JUN 15 2020

Detailed Pro Forma Income Statement

PRINCETON WATER AND WASTEWATER COMMISSION
ADJUSTED TRIAL BALANCE - JUNE 30, 2019

Account No.	Description	Test-Year Actual	Pro Forma Adjustments	Allocations	Pro Forma Operations	
4000	Water Sales	$ 1,520,209	$ -	$ -	$ 1,520,209	
4015	Customer Service	198,648	(36,120)	-	162,528	A
4020	Penalty Income	58,701	-	(26,973)	31,728	
4030	Sale of Stores	11,661	-	(5,358)	6,303	
4040	Labor Sales	6,200	-	(2,849)	3,351	
4046	Bank Customer ACH	1,403	-	(1,403)	-	
4050	Equipment Rental	4,428	-	(2,035)	2,393	
4080	Service Charge & Connection Fees	20,575	-	(9,454)	11,121	
4087	Recovery of Bad Debt	(2,745)	-	1,261	(1,484)	
4095	Prnt Plan Misc Invoices	2,297	-	(1,055)	1,242	
					-	
	Total Operating Revenues	1,821,377	(36,120)	(47,866)	1,737,391	
Administration						
100-6010	Salaries	220,629	30,237	(115,273)	135,593	B
100-6020	Payroll Tax	16,331	2,860	(8,818)	10,373	C
100-6030	Employee Benefits	56,618	(8,851)	(21,949)	25,818	D
100-6040	Uniforms	940	-	(432)	508	
100-6050	Training Expense	7,323	-	(3,365)	3,958	
100-6060	CERS/Pension/OPEB	73,415	(13,057)	(27,735)	32,623	E
100-6070	Utilities	8,063	-	(3,705)	4,358	
100-6080	Gas and Oil	169	-	(78)	91	
100-6090	Equipment Repair	2,376	-	(1,092)	1,284	
100-6100	Supplies	6,882	-	(3,162)	3,720	
100-6110	Insurance	4,278	-	(1,966)	2,312	
100-6121	Professional Services	3,085	-	(1,418)	1,667	
100-6122	Data Processing	10,270	-	(4,719)	5,551	
100-6130	Miscellaneous Expense	3,822	-	(1,756)	2,066	
100-6135	Postage	11,268	-	(5,178)	6,090	
100-6160	Tools & Small Equipment	4,562	-	(2,096)	2,466	
100-6180	Building Repair & Maintenance	3,518	-	(1,617)	1,901	

Water Treatment Plant						
200-6010	Salaries	178,041	22,176	-	200,217	B
200-6020	Payroll Tax	13,362	1,955	-	15,317	C
200-6030	Employee Benefits	67,562	(32,712)	-	34,850	D
200-6040	Uniforms	529	-	-	529	
200-6050	Training Expense	359	-	-	359	
200-6060	CERS/Pension/OPEB	64,787	(16,615)	-	48,172	E
200-6070	Utilities	179,933	-	-	179,933	
200-6080	Gas and Oil	786	-	-	786	
200-6090	Equipment Repair	20,008	-	-	20,008	
200-6100	Supplies	2,123	-	-	2,123	
200-6105	Chemicals	81,088	24,618	-	105,706	F
200-6110	Insurance	41,523	-	-	41,523	
200-6120	Lab Fees	14,677	-	-	14,677	
200-6121	Professional Services	20,470	-	-	20,470	
200-6130	Miscellaneous Expense	1,503	-	-	1,503	
200-6135	Postage	869	-	-	869	
200-6160	Tools & Small Equipment	529	-	-	529	
200-6180	Building Repair & Maintenance	5,279	-	-	5,279	
200-6185	Sludge Removal	-	28,133	-	28,133	G
200-6660	Misc. Material Ex	368	-	-	368	
200-6665	Freight Expense	18	-	-	18	
Maintenance						
400-6010	Salaries	251,546	12,018	(121,107)	142,457	B
400-6020	Payroll Tax	18,720	1,443	(9,265)	10,898	C
400-6030	Employee Benefits	99,312	(38,462)	(27,961)	32,889	D
400-6040	Uniforms	2,711	-	(1,246)	1,465	
400-6050	Training Expense	990	-	(455)	535	
400-6060	CERS/Pension/OPEB	86,150	(22,737)	(29,138)	34,275	E
400-6070	Utilities	13,940	-	(6,405)	7,535	
400-6080	Gas and Oil	14,745	-	(6,775)	7,970	
400-6090	Equipment Repair	8,895	-	(4,087)	4,808	
400-6100	Supplies	5,104	-	(2,345)	2,759	
400-6105	Chemicals	40,481	-	(40,481)	-	
400-6110	Insurance	19,348	-	(8,890)	10,458	
400-6121	Professional Services	1,493	-	(686)	807	
400-6130	Miscellaneous Expense	2,183	-	(1,003)	1,180	
400-6135	Postage	154	-	(71)	83	
400-6140	Rental and Lease	667	-	(306)	361	
400-6160	Tools & Small Equipment	10,544	-	(4,845)	5,699	
400-6180	Building Repair & Maintenance	1,219	-	(560)	659	
400-6650	Inventory Expense	21,119	-	(9,704)	11,415	
400-6660	Misc. Material Ex	29,460	-	(13,537)	15,923	
400-6665	Freight Expense	74	-	(34)	40	
400-6670	Capital Cost/Labor	(55,166)	16,091	-	(39,075)	H
Unallocated Commission						
500-6010	Salaries (Commissioners)	9,000	-	(4,136)	4,864	
500-6110	Insurance	4,971	-	(2,284)	2,687	
500-6150	Attorney Fees	10,058	(4,058)	(2,757)	3,243	I
	Operation and Maintenance Expenses	1,725,081	3,039	(502,437)	1,225,683	
500-6680	Depreciation Expense	803,032	(399,288)	-	403,744	J
	TOTAL OPERATING EXPENSES	2,528,113	(396,249)	(502,437)	1,629,427	
Net Utility Operating Income		$ (706,736)	$ 360,129	$ 454,571	$ 107,964	

APPENDIX B

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2019-00444 DATED JUN 15 2020

Allocation of USDA Series 2019 Bonds

		Overhead Allocations		Allocated Cost
	Project Cost	Factors	$	Breakdown
Project 1: 16" Water Transmission Lane	1,280,000	60.952%	854,852	2,134,852
Project 2: Water Line Imp. UK Researcl	378,000	18.000%	252,450	630,450
Project 3: Master Meter Installation	195,000	9.286%	130,236	325,236
Project 4: Skyline Tank Rehabilitation	247,000	11.762%	164,961	411,961
	2,100,000			
Overhead	1,402,500	100.000%	1,402,499	
Project Total	3,502,500			3,502,499

Project 1: 16" Water Transmission Lane	2,134,852
Project 4: Skyline Tank Rehabilitation	411,961
Total to Be recovered from Retail and Wholesale Customers	2,546,813
Divided by: Total Project Cost	3,502,499
Percentage of Loan - Retail and Wholesale Customers	72.714%

APPENDIX C

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2019-00444 DATED JUN 15 2020

The following rates and charges are prescribed for the customers in the area served by the city of Princeton. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under the authority of the Commission prior to the effective date of this Order.

Wholesale Water Rates

Caldwell County Water District	$ 2.44 Per 100 Cubic Feet
Lyon County Water District	$ 2.44 Per 100 Cubic Feet
Rate Case Expense Surcharge	$697.00 Per Month for 36 Months

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*M. Todd Osterloh
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PO Box 460
Eddyville, KENTUCKY 42038

*Princeton Water and Wastewater
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*James Noel
Superintendent
Princeton Water and Wastewater
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*Princeton Water and Wastewater
Princeton Water and Wastewater
101 E. Market Street
Princeton, KY 42445

*Caldwell County Water District
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Princeton, KY 42445

*Tracy Musgove
Director of Finance
Princeton Water and Wastewater
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*Lyon County Water District
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*Mark David Goss
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*Marvin L Wilson
Wilson Law Firm, PLLC
635 Trade Avenue
PO Box 460
Eddyville, KENTUCKY 42038

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC PURCHASED WATER ADJUSTMENT FILING OF LYON COUNTY WATER DISTRICT	)))	CASE NO. 2021-00195

ORDER

On May 10, 2021, Lyon County Water District (Lyon District) applied for approval to adjust its rates pursuant to the purchased water adjustment (PWA) procedure.[1] Lyon District was notified by electronic letter dated May 13, 2021, that the application was rejected due to certain deficiencies in the application. On May 13, 2021, Lyon District submitted additional information with its response to the deficiency letter, and the application was accepted for filing as of that date. On June 2, 2021, Lyon District supplemented the filing by electronic letter requesting the Purchase Water Adjustment factor be amended from $0.37 per 1,000 gallons to $0.38 per 1,000 gallons.

The Commission notes that in Lyon District's 2019 Annual Report a water loss of 17.7175 percent was reported.[2] Lyon District's application provides updated purchases and sales information for a more current period than the 2019 Annual Report. Commission regulation 807 KAR 5:066(6)(3) states that for ratemaking purposes, a utility's unaccounted-for water loss shall not exceed 15 percent of total water produced

[1] KRS 278.015; 807 KAR 5:068.

[2] *Annual Report of Lyon County Water District to the Public Service Commission for the Year Ended December 31, 2019* at 57.

and purchased, excluding water consumed by a utility in its own operations. Based upon the updated information in the application and the percentage of other water consumed by the utility in its 2019 Annual Report,[3] Lyon District's unaccounted-for water loss is determined to be 19.6166 percent for the updated period.[4] Reduction of Lyon District's unaccounted-for water loss to 15 percent would result in an approximate $18,547.46[5] decrease to purchased water expense. Potentially, Lyon District is paying $0.2088 per 1,000 gallons sold for expenses associated with unaccounted-for water loss in excess of the allowable 15 percent[6] threshold.

The Commission is placing greater emphasis on monitoring utilities that consistently exceed the 15 percent unaccounted-for water loss threshold and strongly encourages Lyon District to pursue reasonable actions to reduce its unaccounted-for water loss. Failure by Lyon District to make significant progress toward reducing unaccounted-for water loss may cause the Commission to pursue additional action with the utility.

Having reviewed the record and being otherwise sufficiently advised, the Commission finds that:

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[3] *Id.*, line 22 (17,410) divided by line 4 (124,476) equals 13.9866%.

[4]

Total Purchases (application PWA Form 1 at 2)	133,762,137
Less Total Sales (application PWA Form 1 at 2)	88,813,800
Less Plant Use (% determined from 2019 AR)	18,708,775
Water Loss – Gallons	26,239,562
Water Loss – Percent	19.6166%

[5] Water loss above 15 percent is 4.6166 percent, potential purchased water expensed reduction (Total water cost at new wholesale rate of $401,755.77 times water loss above 15 percent) = $18,547.46.

[6] Potential purchased water expense reduction divided by sales ($18,547.46/ (88,813,800/1,000)) equals $0.2088 per 1,000 gallons.

1. Lyon District purchases water from Crittenden-Livingston Water District (Crittenden-Livingston District), city of Eddyville (Eddyville), Princeton Water and Wastewater (Princeton), city of Kuttawa (Kuttawa) and Barkley Lake Water District (Barkley District).

2. Princeton filed a rate case with the Commission, Case No. 2019-00444, and a final Order containing approved rates has been issued. The rates approved were applied in this PWA application.[7]

3. Crittenden-Livingston District notified Lyon District that its wholesale rate would increase from $2.58 per 1,000 gallons to $3.34 per 1,000 gallons, effective May 23, 2021. Eddyville notified Lyon District that its wholesale rate would increase from $3.97 per 1,000 gallons to $4.09 per 1,000 gallons, effective July 13, 2020. Lyon District proposes to increase the water rates to its customers effective June 1, 2021, to reflect the increased cost of purchased water from Princeton, Crittenden-Livingston District, and Eddyville.

4. Lyon District proposed a purchased water adjustment factor of $0.38 per 1,000 gallons in its application.

5. During the 12 months ended March 31, 2021, Lyon District purchased 13,950,940 gallons of water from Crittenden-Livingston District, 7,482,000 gallons of water from Eddyville, 65,553,697 gallons of water from Princeton, 45,504,100 gallons of water from Kuttawa and 1,271,400 gallons of water from Barkley District. During the same period, Lyon District sold 88,813,800 gallons of water. The increase in the cost of

[7] Case No. 2019-00444, *Electronic Proposed Adjustment of the Wholesale Water Service Rates of Princeton Water and Wastewater* (Ky. PSC June 15, 2020).

purchased water is $32,975.29, resulting in a purchased water adjustment factor of $0.38 per 1,000 gallons.

6. The purchased water adjustment factor of $0.38 per 1,000 gallons, as calculated in Appendix A to this Order, is fair, just and reasonable and should be approved.

7. Lyon District's proposed rates should be approved.

8. The rates as set forth in Appendix B to this Order are fair, just and reasonable and should be approved for water service rendered by Lyon District on and after June 1, 2021.

IT IS THEREFORE ORDERED that:

1. The purchased water adjustment factor of $0.38 per 1,000 gallons is approved.

2. The rates proposed by Lyon District are approved.

3. The rates as set forth in Appendix B to this Order are approved for water service rendered by Lyon District on and after June 1, 2021.

4. Within 20 days of the date of entry of this Order, Lyon District shall file with the Commission, using the Commission's electronic Tariff Filing System, revised tariff sheets showing the rates approved herein.

5. This case is closed and removed from the Commission's docket.

By the Commission

ENTERED

JUN 04 2021

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KENTUCKY PUBLIC
SERVICE COMMISSION

ATTEST:

Linda C. Bridwell

Executive Director

Case No. 2021-00195

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2021-00195 DATED JUN 04 2021

	Base Rate	New Rate	Increase
Crittenden-Livingston District			
Purchases in Gallons	13,950,940	13,950,940	
Wholesale rate	$2.58/1,000	$ 3.34/1,000	
	$35,993.43	$46,596.14	$10,602.71
Eddyville			
Purchases in Gallons	7,482,000	7,482,000	
Wholesale rate	$3.97/1,000	$4.09/1,000	
	$29,703.54	$30,601.38	$897.84
Princeton			
Purchases in Gallons	65,553,697	65,553,697	
Wholesale rate	$3.06/1,000	$3.26/1,000	
	$200,594.31	$213,705.05	$13,110.74
Monthly surcharge	$697.00	12 months	$8,364.00
Kuttawa			
Purchases in Gallons	45,504,100	45,504,100	
Wholesale rate	$2.19/1,000	$2.19/1,000	
	$99,653.98	$99,653.98	No Change
Barkley District			
Purchases in Gallons	1,271,400	1,271,400	
Wholesale rate	$2.23/1,000	$2.23/1,000	
	$2,835.22	$2,835.22	No Change
Total increased water cost			$32,975.29

Increased water cost	$32,975.29	
Divided by sales	88,813,800/1,000	
	0.3712 per	1,000 Gallons
	or $ 0.38 per	1,000 Gallons

APPENDIX B

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2021-00195 DATEDJUN 04 2021

The following rates and charges are prescribed for the customers in the area served by Lyon County Water District. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under the authority of the Commission prior to the effective date of this Order.

Monthly Water Rates

5/8- x 3/4-Inch Meter		
First	2,000 Gallons	$25.76 Minimum Bill
Next	3,000 Gallons	.01100 per gallon
Next	5,000 Gallons	.00788 per gallon
Next	10,000 Gallons	.00663 per gallon
Over	20,000 Gallons	.00588 per gallon
1-Inch Meter		
First	15,000 Gallons	$121.95 Minimum Bill
Next	5,000 Gallons	.00663 per gallon
Over	20,000 Gallons	.00588 per gallon
1 ½-Inch Meter		
First	25,000 Gallons	$165.75 Minimum Bill
Over	25,000 Gallons	.00588 per gallon
2-Inch Meter		
First	45,000 Gallons	$298.35 Minimum Bill
Over	45,000 Gallons	.00588 per gallon

*Don Robertson
Chairman
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Andy Beshear
Governor

Rebecca W. Goodman
Secretary
Energy and Environment Cabinet

Commonwealth of Kentucky
Public Service Commission
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Kent A. Chandler
Chairman

Amy D. Cubbage
Vice Chairman

Marianne Butler
Commissioner

October 11, 2021

PARTIES OF RECORD

RE: Case No. **2021-00391**

Lyon County Water District
(Alternative Rate Filing Adjustment)

This letter is to acknowledge receipt of notice of election of use of electronic filing procedures to file an application in the above case. The notice was date-stamped received October 11, 2021, and has been assigned Case No. 2021-00391. In all future correspondence or filings in connection with this case, please reference the above case number.

All documents submitted to the Commission in this proceeding must comply with the rules of procedure adopted by the Commission found in 807 KAR 5:001. Any deviation from these rules must be submitted in writing to the Commission for consideration Additionally, confidential treatment of any material submitted must follow the requirements found in 807 KAR 5:001 (13).

Materials submitted to the Commission which do not comply with the rules of procedure, or that do not have an approved deviation, are subject to rejection by Commission pursuant to 807 KAR 5:001 (3). In order to insure cases are processed in a timely manner and accurate reliable records are created, please make sure that the rules of procedure are followed. Should you have any questions, please contact Brandon Bruner in the Filings Branch at 502-564-3940.

Sincerely,

Linda C. Bridwell
Executive Director

LCB/AH

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