Lafayette Utilities System and LUS Fiber

2024 Consulting Engineer's Comprehensive Annual Report
Project No. 166613

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2024 Consulting Engineer's Comprehensive Annual Report

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Lafayette Utilities System and LUS Fiber
2024 Consulting Engineer's Comprehensive Annual Report
Lafayette, Louisiana
Project No. 166613

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prepared by

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LIST OF ABBREVIATIONS

Abbreviation	Term/Phrase/Name
°F	Degrees Fahrenheit
A&G	Administrative and General
ACE	Affordable Clean Energy
ACFR	Annual Comprehensive Financial Report
ACSR	Aluminum-conductor steel-reinforced cable
ACTP	Ambassador Caffery Treatment Plant
ADMS	Advanced Distribution Management System
AMI	Advanced Metering Infrastructure
AO	Administrative Order
APPA	American Public Power Association
ARPA	American Rescue Plan Act
AWIA	America's Water Infrastructure Act
AWWA	American Water Works Association
BOD5	Biological oxygen demand
BA	Balancing Authority
Bond Ordinances	General Bond Ordinance
Bonin	Louis "Doc" Bonin Generation Station
BPA	Blanket Purchase Agreement
Burns & McDonnell	Burns & McDonnell Engineering Company, Inc.
CAIDI	Customer Average Interruption Duration Index
CATV	Cable television
CBRS	Citizens Broadband Radio Service
CCR	Coal Combustion Residuals
CCR	Consumer Confidence Report
CCTV	Closed-circuit television video
CEMS	Continuous emission monitoring system
CFB	Circulating Fluidized Bed
Charter	Home Rule Charter
CIAC	Contribution In Aid of Construction
CIP	Capital Improvement Program
City/Lafayette	City of Lafayette, Louisiana
CMEP	Compliance Monitoring and Enforcement Program
CMOM	Capacity, Management, Operations, and Maintenance Program
CO_2	Carbon dioxide
Commission Boulevard	Commission Boulevard Water Treatment Plant
CPP	Clean Power Plan
CSAPR	Cross State Air Pollution Rule

Abbreviation	**Term/Phrase/Name**
DA	Deaerator
DBPR	Disinfectants and Disinfection Byproducts Rule
Demin	Demineralized water
DP	Distribution Provider
DSC	Debt service coverage
DSCR	Debt service coverage ratio
DSL	Digital Subscriber Line
DVR	Digital video recorder
EDA	U.S. Department of Commerce’s Economic Development
EGU	Electric Generating Unit
ELG	Effluent limitation guidelines
EMMA	Electronic Municipal Market Access
EMS	Energy management system
EPA	Environmental Protection Agency
ERP	Emergency Response Plan
ESP	Electro-static precipitator
ESRI	Environmental Systems Research Institute
ESTP	East Sewage Treatment Plant
Fair Completion Act	The Local Government Fair Completion Act
FC	Fuel Charge
FCC	Federal Communications Commission
FCI	Faulted circuit indicators
FEMA	Federal Emergency Management Agency
FGD	Flue gas desulfurization
FRP	Facility Response Plan
FTTP	Fiber-to-the-premises
FWH	Feed water heater
FY	Fiscal year
GAC	Granular activated carbon
Gbps	Gigabits per second
GE	General Electric
GIS	Geographic information system
Gloria Switch	Gloria Switch Remote Site
GO	Generator Owner
GOHSEP	Governor’s Office of Homeland Security and Emergency Preparedness
GPON	Gigabit Passive Optical Network
GSU	Generator step-up
HAA5	Five haloacetic acids
HFC	Hybrid Fiber-Coaxial

Abbreviation	Term/Phrase/Name
HP	High pressure
HPBX	Hosted voice
HPC	High pressure combustion
HSE	Hot section exchanges
I&I	Inflow and infiltration
ICAP	Installed capacity
ILOT	In lieu of tax
IRP	Integrated resource plan
ISP	Internet service providers
JLWP	Jim Love Water Treatment Plant
kV	Kilovolts
LATA	Local Access and Transport Area
LDH	Louisiana Department of Health
lb/hr	Pounds per hour
LCG	Lafayette City-Parish Consolidated Government
LCRR	Lead and Copper Rule Revisions
LDEQ	Louisiana Department of Environmental Quality
LiDAR	Light Detection and Ranging
LP	Low pressure
LPDES	Louisiana Pollutant Discharge Elimination System
LPPA	Lafayette Public Power Authority
LPSC	Louisiana Public Service Commission
LPSC Rules	LPSC Cost Allocation and Affiliate Transaction Rules
LPUA	Louisiana Public Utilities Authority
LRZ	Local Resource Zone
LS	Lift stations
LSL	Lead service line
LTE	Long-term evolution
LUS	Lafayette Utilities System
LUS Fiber	Communications System
Magellan	Magellan Advisors
MAIFI	Momentary Average Interruption Frequency Index
Mbps	Megabits per second
MCL	Maximum contaminant levels
MCR	Maximum continuous rating
MDU	Multi-Dwelling Unit
MG	Million gallons
MGD	Million gallons per day
MISO	Midcontinent Independent System Operator, Inc.

Abbreviation	Term/Phrase/Name
MRDL	Maximum residual disinfectant level
MRDLG	Maximum residual disinfectant level goal
MSGP	Multi-Sector General Permit
MSRB	Municipal Securities Rulemaking Board
MV	Medium voltage
MVA	Megavolt amperes
MW	Megawatts of electricity
NAAQS	National Ambient Air Quality Standards
NAICS	North American Industry Classification System
NERC	North American Electric Reliability Corporation
NERC CIP	NERC Critical Infrastructure Protection
NETP	Northeast Treatment Plant
NOV	Notice of Violation
NO_x	Nitrous oxide
NSPS	New Source Performance Standards
NTEC	Navajo Transitional Energy Company
NWP	North Water Treatment Plant
O&M	Operations and Maintenance Expense
O&P	Operations and Planning
OLT	Optical Line Terminal
OMS	Outage Monitoring System
ONT	Optical Network Terminal
OSI	Open Systems International, Inc.
Parish	Lafayette Parish
PCCC	Permanently Ceasing Coal Combustion
PFAS	Polyfluoroalkyl substances
PIAL	Property Insurance Association of Louisiana
POMS	Power Outage Monitoring System
PON	Passive Optical Network
POTW	Publicly owned treatment works
PRB	Powder River Basin
PRI	Primary Rate Interface
PSIG	Pounds per square inch gauge
PVC	Polyvinyl chloride
RATA	Relative Testing Accuracy Audit
RCRA	Resource Conservation and Recovery Act
Report	Consulting Engineer’s Comprehensive Annual Report
ROP	Rules of Procedure
RRA	Risk and Resilience Assessment

Abbreviation	Term/Phrase/Name
SAIDI	System Average Interruption Duration Index
SAIFI	System Average Interruption Frequency Index
SBR	Sequencing batch reactors
SCADA	Supervisory control and data acquisition
SEC	Securities and Exchange Commission
SNCR	Selective non-catalytic reduction
SO_2	Sulfur dioxide
SPC-SPCC	Spill Prevention and Control –Spill Prevention, Control, and Countermeasure
SPRINT	General Electric's Spray Intercooling system
SSIs	Statistically Significant Increases
SSTP	South Sewage Treatment Plant
STG	Steam turbine generator
SWP	South Water Treatment Plant
SWPA	Southwestern Power Administration
TAS	Turbine Air Systems
TDS	Total dissolved solids
TEA	The Energy Authority
TIER	Times interest earned ratio
TO	Transmission Owner
TOP	Transmission Operator
TP	Transmission Planner
TPL	Transmission planning
TSS	Total suspended solids
TTHM	Total trihalomethanes
UCMR	Unregulated Contaminant Monitoring Rule
UF	Ultra filtration
Utilities System	Lafayette Utilities System Electric, Water, and Wastewater Systems
VoIP	Voice over Internet Protocol
VSV	Variable stator vane
VFD	Variable Frequency Drive
WWTP	Wastewater treatment plant
XGS-PON	10 Gigabit Symmetrical Passive Optical Network

Executive Summary

Introduction

The Lafayette Utilities System ("LUS") Electric, Water, and Wastewater Systems (collectively the "Utilities System") General Bond Ordinance and Communications System (also referred to as "LUS Fiber") General Bond Ordinance (collectively, the "Bond Ordinances") set forth specific duties and responsibilities of the Consulting Engineer, which include advising LUS on its appointment of a Chief Operating Officer, providing continuous engineering counsel to the Lafayette City-Parish Consolidated Government (Lafayette Consolidated Government or "LCG") in connection with operations of the Utilities System and Communications System, advising on rate revisions, and preparing an annual comprehensive report (specifically, this Consulting Engineer's Comprehensive Annual Report or "Report") on the operations of LUS and LUS Fiber after the close of each fiscal year ("FY").

LCG retained Burns & McDonnell Engineering Company, Inc. ("Burns & McDonnell") as the LUS and LUS Fiber Consulting Engineer in January 2021. The analyses and investigations completed by Burns & McDonnell in the performance of its due diligence review and assessments of LUS and LUS Fiber are similar to prior reviews. Therefore, the organization, content, conclusions, and recommendations contained within this Report are similar to previous reports. LCG operates on a fiscal year, beginning November 1 and ending on October 31 of the following year. Unless otherwise stated, all data in this Report is presented on a FY basis.

In preparation of this Report, Burns & McDonnell relied upon information provided by LUS, LUS Fiber, LCG, and Cleco Corporate Holdings ("Cleco"). Consulting engineers from Burns & McDonnell conducted site visits to LUS's and LUS Fiber's system assets and conducted onsite and virtual interviews with LUS, LUS Fiber, and Cleco management in February 2024.

Bond Ordinance Requirements

LUS, LUS Fiber, and Lafayette Public Power Authority ("LPPA") have bond ordinance requirements which are described in more detail in Section 2 of this Report. As of October 31, 2023, the City was paying debt service on outstanding bonds for LUS (Series 2017, 2019, 2021), LUS Fiber (Series 2015 and Series 2021), and LPPA (Series 2015 and 2021). The Series 2012 Bonds were all recently refunded with the Series 2021 Bonds in FY 2022. The LUS Series 2023 Bonds were issued on November 15, 2023. This Report addresses several covenants and continuing disclosures included in the Bond Ordinances including, but not limited to, the condition of the assets, operation of the system, accounting and financial compliance, and financial performance of LUS and LUS Fiber. Continuing disclosures are included in Sections 8 through 12 of this Report.

Utilities System Overall Performance

LUS continued to experience customer growth across all three utility systems in FY 2023 with total customer count growth of approximately one percent. LUS use per customer has remained relatively consistent over the last few years.

LUS experienced a 4 percent decrease in total system revenues in FY 2023, which was primarily due to a 9 percent decrease in electric revenues. Electric revenue decrease was driven by lower fuel costs which are a direct pass-through to electric customers. Water total operating revenues increased by nearly 17 percent, while wastewater revenues increased 16 percent, which was primarily driven by a drought and the implementation of rate increase in FY 2023. The decrease in total revenues was due to a significant decrease in fuel costs. Water received an 8 percent rate increase and wastewater received a 9.5 percent increase at the beginning of FY 2023.

LUS FY 2023 total revenues were higher than originally budgeted while the total expenses were lower than originally budgeted. Higher revenues were driven by interest income and slightly higher water and wastewater sales due to a drought. The lower expenses were driven by the cost of fuel. Normal capital spending was lower than budgeted, however LUS major capital projects continued to draw down reserves.

LUS's financial performance remained relatively strong in FY 2023. LUS continued to maintain a strong debt service coverage ("DSC") ratio and had sufficient cash to fund its operating and capital expenditures. LUS completed a rate study in FY 2023 which proposed a series of rate increases for the electric, water, and wastewater utilities. The approved rate increases will allow LUS to continue to fund operating and capital requirements over the next five years and fund new debt for several large upcoming projects in its capital improvements program ("CIP") including the new Bonin 4 power plant project.

Communications System Overall Performance

Since 2019, the Communications System's number of accounts increased at a compound annual rate of [redacted] percent in 2023. At the current customer levels, the Communications System generates sufficient revenues to meet operating and maintenance expenses, debt service, capital improvements, inter-utility loan payments, imputed taxes, and all other financial obligations. The Communications System's operating expenses are holding steady while revenue continues to grow but at a slower rate than past years. Further, LUS Fiber's profit margin is sufficient to allow the Communications System to spend approximately [redacted] per year on continued network expansion.

The Communications System's cash flow reserves are sufficient to cover its costs and revenue trends suggest LUS Fiber will continue to generate positive cash flow beyond FY 2023.

The FY 2022 Attest Audit Report and Certification required by the LPSC were completed and delivered to LCG on November 16, 2023. The report indicated that LCG complied with the Local Government Fair Competition Act and the Louisiana Public Service Commission rules as it relates to the cost allocation and affiliate transaction rules during the year ended October 31, 2022 in all material respects.

Over the past four years, the COVID-19 pandemic has continued to accelerate the cord-cutting trend (both in the Lafayette market and nationwide), leading to higher-than-expected churn of video subscribers. However, growth in the Communications System's internet subscribers and migration of existing customers to higher bandwidth tiers has made up for shrinking video revenue. In order to continue this growth, LUS Fiber will need to monitor its pricing, continue with its planned marketing initiatives, and grow into new parishes with its grant funded projects.

As of the writing of this Report, LUS Fiber has achieved a residential internet take-rate (i.e., the percentage of eligible premises that subscribe to service) in line or greater than in more rural areas with what other fiber-to-the-premises operators (both municipally owned and private) have achieved in other markets with a capable cable competitor. Increased demand for upload capacity—which is a competitive advantage of the Communications System's fiber technology—may help fuel continued growth.

From a technical standpoint, the network has sufficient excess network capacity to support numerous additional lit and/or dark fiber customers. And given that most of the Communications System's costs, other than cable TV costs, are fixed and do not vary when new customers are added, revenues associated with customer growth above current levels likely will further improve the system's financial performance.

In FY 2023, LUS Fiber is funding additional network expansion in Lafayette, Jennings, Vermillion, Acadia, Iberia, and Evangeline totaling $43.9 million using a combination of federal grants, other parish contributions, and LUS Fiber funds. The neighboring parishes will contribute approximately $3.0 million while the federal grants will contribute $31.7 million. The remaining $9.2 million is being funded by LUS Fiber. LUS Fiber estimates this network expansion will bring fiber service to [redacted] to [redacted] new customers in the region generating additional net income for the Communications System.

Utilities System Director

In February 2022, after a nationwide recruiting search led by Preng & Associates, Lafayette Mayor-President Josh Guillory appointed Jeffrey Stewart as the permanent Utilities Director. Mr. Stewart has over 23 years of experience at LUS. Mr. Stewart has a Bachelor of Science in Electrical Engineering from Louisiana State University and is a registered Professional Engineer in Louisiana. He has served in a variety of roles over his tenure at LUS as described later in this report.

Communications System Director

Mr. Ryan Meche served as the LUS Fiber System Director from March 2021 to January 2024. Mr. Meche has recently left LUS Fiber. At the time of this report, LCG is currently searching for a new permanent director. As the search for a new System Director is still ongoing, Jeffrey Stewart, the current Utilities Director for LUS, was appointed as the Interim System Director during this time of transition until a permanent LUS Fiber System Director has been identified and appointed. A new LUS Fiber System Director is expected to be hired and begin within the next month.

Utilities System Observations and Recommendations

Based on the information and assumptions relied upon, as included within this Report, the general observations and recommendations for the Utilities System are presented below.

- Based on physical observations of the system and review of records, LUS is maintaining the properties in a manner consistent with utility practices.
- LCG, LUS, and LPPA have an efficient management structure in place to maintain the utility property and maintain adequate accounting and financial records for each of the three utility systems.
- LUS prepares budgets and has budgetary control measures that have enabled the utility to maintain strong financials over the last five years. Revenues were sufficient to meet all financial obligations including debt payment, operating expenses, ILOT payments, and capital funding requirements. LUS has maintained competitive utility service rates while exceeding its minimum 1.0 DSC ratio.
- LUS has been deploying the necessary capital for the repair, replacement, and expansion of the utility systems. Based on Burns & McDonnell's review of the historical and projected capital improvement plan, LUS is making necessary repairs, renewals, replacements, extensions, betterments, and improvements of each of the utility systems.
- For each of the utility systems, LUS is striving to maintain competitive salaries to recruit and retain talented engineers, managers, operators, technicians, and financial staff. The managers and staff in place within LUS appear to be well organized and committed to successfully running the utilities.

Electric Utility System

Based on the information and assumptions relied upon, as included within this Report, the general observations and recommendations for the Electric Utility System are presented below.

- Based on visual inspection of facilities, records audit, and interviews of LUS staff, the LUS distribution and transmission system is in good condition, maintained properly and in accordance with industry practices.
- LUS is proactive and strategic in its cyclical inspection, maintenance, and replacement of equipment.
- The LUS transmission and distribution planning and construction practices are proactive and aligned with a focus on reliability, resiliency, and efficient operation of the system.
- The LUS distribution system consistently outperforms regional and national averages for system reliability and availability, which reflects its intentional and proactive maintenance, planning, and construction practices.
- LUS revenues were sufficient to meet all financial obligations including operating expenses, LUS and LPPA debt service, capital improvements, ILOT payments, and required reserves. LUS's system operating, expense, debt, revenue, and related ratios reflect a financially stable and healthy utility that is currently offering competitive, lower than market average rates.
- The first of the two approved 3 percent electric rate increases from the rate study completed in FY 2022 went into place effective November 1, 2023 and will begin to increase electric revenues in FY 2024. LUS completed a rate study update in early FY 2024 and the proposed rate plan was approved and adopted by the City Council on March 5, 2024. The rate increases will generate revenues that allow LUS to continue to maintain its financial performance and fund planned future operating and capital expenditures.
- The electric system revenue recovery structure, like most electric utilities, is misaligned with how costs are incurred. LUS recovers nearly 85 percent of its revenues through variable charges when approximately 50 percent of its costs are fixed. This creates a systemic problem when energy usage per customer is declining, but customer growth is increasing. The approved electric rates are gradually increasing the customer charge for Residential customers over the next few years to better recover fixed costs. Commercial customers will see increases in both the customer charge and monthly demand charge.
- LUS recently issued new bonds at the end of FY 2023 to support various electric, water, and wastewater projects. The bond funding is reasonable and appropriate to fund these projects and the forecasted revenues represented in the continuing disclosure financial projections are expected to be

able to fund the new debt service associated with the new bonds.

- The Utilities System CIP has been sufficient to sustain and improve the integrity and reliability of the system.
- LUS completed an IRP in FY 2020. The IRP had several power supply initiatives for LUS to consider which included the retirement of Rodemacher Unit 2 in 2028, the construction of a new LUS owned simple cycle gas turbine power plant at the existing Doc Bonin site in 2028, and the addition of utility scale solar which would be procured through power purchase agreements.
- LUS and the joint owners of Rodemacher Unit 2 have all agreed to retire the unit from service in 2027 and decommission the plant in 2028. Cleco, in collaboration with LUS and the other joint owners, has begun preparing a decommissioning plan for the plant. Costs for the decommissioning are included in the forecast.
- On March 5, 2024, LUS received approval to proceed forward with the construction of a new simple cycle gas turbine power plant at the Bonin Generating Station site. The project is estimated to cost up to $362 million and will be funded with new bonds in late 2024 and late 2026 totaling up to $400 million.
- LUS has been working to secure new utility scale solar energy over the past two years. Pricing has increased considerably both in the U.S. and for the solar project under development. LUS recently issued a new RFP for solar due to the contract negotiation delays and project pricing concerns. Prices were not in alignment with LUS budgets for energy costs. LUS will continue to monitor the market and evaluate future potential options for utility scale solar energy.
- LUS was experiencing some issues with Rodemacher Unit 2 coal delivery and supply due to market constraints in 2022 however that is no longer a concern and coal supply and inventory has been restored.
- LUS has performed well in FY 2023 from a reliability standpoint. LUS's performance on the four reported indices is consistent or significantly better than typical national median performance reported by both regional and national benchmarks. LUS has performed well in NERC CIP audits, NERC 693 operational audits, and LDEQ environmental inspections.
- LUS continues to make upgrades across its transmission system and distribution system to improve resiliency and redundancy. Major capital projects include upgrades to the Peck Substation and a new transmission line between the Peck Substation and the Northeast Substation which will relieve loading on Pont Des Mouton and Peck stations as well as serve as another path for power to flow from the 230kV system to the 69kV system adding resiliency and redundancy.

- LUS has continued to make upgrades to its distribution system to improve automation, replace aging infrastructure, expand service where needed, and improve reliability. LUS's five-year CIP includes funding to continue this practice which will enable LUS to continue to have strong reliability indices.
- LUS completed the installation of a new outage management system (OMS) for the electric utility in 2022. In FY 2023, the OMS improved reliability and resiliency of the distribution system and has enabled LUS to restore customer service more quickly during storms and various outages.
- The organizational structure and management of the Electric System engineering and operations areas appears to be strong based on initial observations, interviews, organizational structures, and manpower within each department.
- The recruitment and retention of quality resources has continued to be a challenge for all LUS departments and even more so over the past two years as labor market inflation has increased rapidly. The number of open positions as compared to budgeted staffing levels has continued to widen and LUS is having an increasingly difficult time attracting new staff to replace key personnel that are retiring. LUS has historically worked internally to develop quality resources through training programs to retain employees, across multiple departments, and specifically addressing electric lineman and customer service positions. The LUS management team has also worked with local schools to hire and retain strong talent that appreciates the benefits provided by a more stable municipal utility business when compared to the oil and gas business of the gulf coast however with a competitive labor market this is becoming more of a challenge. LUS should conduct an evaluation of utility employee pay scales, position roles and responsibilities, and market conditions to improve acquisition and retention of utility staff immediately.

Water Utility System

Based on the information and assumptions relied upon, as included within this Report, the general observations and recommendations for the Water Utility System are presented below.

- Based on visual inspection of facilities, review of records, and interviews of LUS staff, the LUS water treatment facilities are in good condition, maintained properly and in accordance with industry practices.
- The organizational structure and management of the water system engineering and operations areas appears to be strong based on initial observations, interviews, organizational structures, and manpower within each department.

- As mentioned previously in the electric utility system findings, all LUS departments are having challenges attracting and retaining staff due to lower than market labor rates and a competitive labor market. LUS should act immediately to remedy this as recommended previously.
- LUS completed a rate study in FY 2022 and the proposed rate plan was adopted. The adopted rate increases are expected to generate revenues that will allow LUS to continue to maintain its financial performance. New water rates were put into place effective November 1, 2022. LUS completed another rate study in FY 2023 which proposed additional 5 percent rate increases in FY 2027 and FY 2028. LUS has not yet requested approval for the FY 2027 and FY 2028 water rate increases.
- LUS issued new bonds in FY 2023 to support various electric, water, and wastewater projects. The bond funding is reasonable and appropriate to fund these projects and the forecasted revenues represented in the continuing disclosure financial projections are forecasted to fund the new debt service associated with the new bonds.
- Water wholesale sales represent roughly 30 percent of total demand and revenue over the last five years. LUS coordinates closely with its wholesale customers regarding growth for planning purposes and should continue to do so. LUS has recently increased its wholesale rates in FY 2023 and FY 2024 and is planning to implement additional wholesale water rate increases in FY 2025.
- Academic studies of the Chicot aquifer conducted within the past decade have sought to assess the outlook of future water availability in the region due to groundwater withdrawals that may be resulting in saltwater intrusion, water quality degradation, and land subsidence. LUS should continue maintaining awareness of the long-term availability and viability of the Chicot aquifer as a regional water source.
- LUS has begun preparing for operational changes brought about by the LCRR, specifically in developing a lead service line ("LSL") inventory to support development of an LSL Replacement Plan and revisions to the lead and copper sampling. On November 30, 2023, EPA announced the proposed Lead and Copper Rule Improvements ("LCRI"), which included modifications to the LCRR requirements. This update focused on the replacement of 100% of lead pipes in drinking water systems within 10 years of the promulgation of this legislation, requiring that LUS identify any unknown materials on the system-side and customer-side of the water service. LUS has begun preparing for operational changes brought about by the LCRR and LCRI. The EPA mandated all systems with any LSLs to prepare and submit to its State regulatory agency the LSL inventory, along with an LSL Replacement Plan and publicly accessible inventory by October 16, 2024. LUS is actively working on completing the LSL Inventory and Replacement Plan and is expected to submit

them by the deadline. LUS plans to launch a website to make the LSL Inventory accessible to the public.

- Overall unaccounted for water (i.e. losses) on a percentage basis have increased over the last five years. With relatively steady water production and a general decline in water sales, unaccounted for water has increased from 7.4 percent in 2016 to approximately 12.5 percent from 2020 to 2022. In 2023, unaccounted for water increased to 14.5 percent. LUS previously engaged the services of Water Company of America to evaluate water loss in the LUS distribution system, enabling LUS to monetize a portion of previously unaccounted for water prior to 2022. The increase in water loss in 2023, despite the mitigation efforts by LUS, is believed to be caused by drought and leaking water mains. Other strategies LUS is currently implementing to resolve water loss include improving the reliability of water metering and public outreach. LUS has already replaced more than half of its water meter modules as of the completion of this report.
- Water main breaks have trended upwards over the previous 5 years. During the same period, LUS has replaced water mains at a rate of less than 0.1% per year. LUS should consider planning for renewal and replacement of aging infrastructure over its anticipated service life. LUS was awarded $5M in federal funds for water main replacements and plans to provide $3M of LUS funds to increase the amount of water main replacements in the near-term. Additionally, LUS plans to hire contractors for the replacement and repair of water mains to augment the capabilities of LUS staff.
- For both the Jim Love Water Treatment Plant and North Water Treatment Plant, LUS could consider implementing additional safety measures for chlorine gas cylinders in the event of a pressurized discharge. Potential safety measures could include using containment vessels for in-use cylinders or a scrubber system to ensure that a chlorine gas leak is safely contained. Currently, there are no provisions to contain a pressurized leak other than on-call services by the chlorine gas supplier.
- Recent drought has highlighted the opportunity to bolster LUS water supply capacity. As part of this initiative, LUS should consider developing additional water supply wells to meet peak demand while also providing additional well redundancy. Based on differences between water treatment and current firm well capacities, suggested areas for consideration of additional wells include the JLWP, NWP, Commission Boulevard Plant, Gloria Switch, and the North Service Area. Projects are currently planned for new wells at the JLWP (2027), the Commission Boulevard Plant (2026), and the Gloria Switch Site (2028). LUS should consider the need for additional water supply wells in the North Service Area.
- Additional water storage is another measure that LUS could consider for added system resiliency and

redundancy. For both the JLWP and NWP, additional ground storage will be added in the near future. The five-year capital improvement program has identified budgets for these improvements. A project at the JLWP to install a new 1.25-M gallon GST is expected to be commissioned in 2024 and a project for the NWP is planned for 2026. LUS should consider evaluating the benefit of additional water storage at water treatment plant sites or within the distribution system as part of a water system master plan.

- Both the Jim Love Water Treatment Plant and North Water Treatment Plant lack the ability to provide full backup power with existing generators. LUS could consider purchasing additional portable emergency generators to provide the full power load requirement of all water supply wells at both the JLWP and NWP during an outage. This would entail two (2) or more additional generators for the JLWP and one (1) or more additional generators for the NWP.

- The 16-inch diameter finished water pipeline that conveys water out of the North Water Treatment Plant to the distribution system presents a hydraulic bottleneck and restricts the amount of finished water able to leave through that line likely due to calcium carbonate scale accumulation. LUS staff have reported increasing frequency of pressure loss events (i.e., less than 20 psi) in this service area, despite proximity to the NWP high service pumps and the North Park Elevated Tower. LUS could consider performing a system-pressure study with focus on the north service area and developing a program to replace the water mains in this area.

- LUS could consider using a product of at least 70 percent orthophosphate (and 30 percent polyphosphate) as opposed to the currently used polyphosphate to provide corrosion control for the distribution system.

- The JLWP and NWP lime systems were noted to not have the ability to feed chemical based on concentration set point and plant flow rate. It is suggested that LUS evaluate rehabilitating or replacing the lime feed systems with new units that will give operators the ability to control dose. Additionally, LUS should consider performing a technical evaluation of the water quality being sent to the distribution system with emphasis on finished water corrosion indices (i.e., Langelier Saturation Index, in addition to others), lime feed, and coagulant chemical selection.

- LUS last completed a Water Master Plan in 2001. Due to development that has occurred since then, LUS should consider an update its master plan to project future growth and associated water flow rates; assess existing and future water system capacity and storage needs; and identify long-term capital improvements required for future development, system expansion, and condition-related improvements. The results of that assessment could be used to further develop capital improvement planning to address critical assets over a long-term period, with targeted strategies to address high-priority items. This effort could include planning for renewal and replacement of aging infrastructure over its anticipated service life. LUS initiated discussions about the scope of such evaluations in 2023.

Wastewater Utility System

Based on the information and assumptions relied upon, as included within this Report, the general observations and recommendations for the Wastewater Utility System are presented below.

- Based on visual inspection of facilities, review of records, and interviews of LUS staff, the LUS wastewater treatment facilities are in good condition, maintained properly and in accordance with industry practices.
- The organizational structure, management, and employee retention of the wastewater system engineering and operations areas appears to be strong based on initial observations, interviews, organizational structures, and manpower within each department.
- As mentioned previously in the electric utility system findings, all LUS departments are having challenges attracting and retaining staff due to lower than market labor rates and a competitive labor market. LUS should act immediately to remedy this as recommended previously.
- LUS staff have indicated that 2023 was a relatively dry year. Wastewater flow treated in 2023 was 5 percent more than 2020; however, sanitary sewer overflows increased from 2022 to 2023 but were less than the 5-year rolling average. LUS efforts to clean and rehabilitate its sanitary sewer system as part of its AO are likely contributing to the reduced number of sanitary sewer overflows observed over time.
- Implementation of preventative maintenance procedures in recent years has been noted by LUS staff to be beneficial at limiting downtime and emergency repair costs.
- LUS completed a rate study in FY 2022 and the proposed rate plan was approved. The adopted rate increases which were effective starting November 1, 2022 are generating revenues that allow LUS to continue to maintain its financial performance. LUS completed another rate study in FY 2023 which proposed additional 5 percent rate increases in FY 2027 and FY 2028. LUS has not yet requested City council for approval for the FY 2027 and FY 2028 wastewater rate increases.
- The Water Sector Program was created in 2021 by the State of Louisiana to provide grant funding for repairs, improvements and consolidation of community water and sewer systems around the state.

$300 million from the American Rescue Plan Act was provided to the program. LUS submitted applications to the program in late 2021. In January 2022, LUS was notified that it was awarded a total of approximately $4.83 million in grant funding for three (3) wastewater treatment plant areas (ACTP – 5 projects, NETP – 5 projects, and ESTP – 3 projects) as part of Round 1 of the program. LUS was notified in December 2022 that for FY 2023, it was awarded a total of approximately $6.6 million in grant funding for additional wastewater projects at the South Sewerage Treatment Plant Area, $2 million in grant funding for wastewater projects at the ACTP, NETP, and ESTP for facility improvements, and lastly $2.8 million in grant funding for collection system improvements.

- Additional funding of $5 million was awarded to LUS by the USEPA for the South Gravity Sewer Upgrade consisting of the installation of a new lift station and nearly three miles of force main from the downtown area. This project will help to alleviate sewer backups in the downtown area that have hindered further development.
- LUS issued new bonds in FY 2023 to support various electric, water, and wastewater projects. Based on the financial projections contained in the continuing disclosure, LUS is expected to generate revenue needed to cover the incremental debt service expense from the new bonds.
- LUS currently has agreements for access to areas totaling more than the area physically required to contain all produced biosolids. The additional area under lease is necessary because the land-use agreements require LUS to accommodate farming activities, which reduces the availability of these spaces. LUS may consider evaluating new, or restructured, land-use agreements to provide better availability of land or flexibility for the application of biosolids to potentially reduce costs.
- LUS could consider improvements at its WWTPs to allow for production of Class A biosolids. This transition could provide additional flexibility for biosolids disposal, which could help limit the reported challenges with the availability of land application sites. LUS has identified a sludge drying project in its CIP. LUS could consider completing a preliminary engineering study to evaluate the scope, costs, and feasibility of this project.
- LUS could consider evaluating a mechanical dewatering process at the NETP to remove excess water prior to lime stabilization. This WWTP generates biosolids at approximately 2 to 3 percent solids by weight, and the other three WWTPs produce biosolids at approximately 22 to 27 percent solids by weight after processing with mechanical equipment. This could also alleviate some challenges with the frequency of land application. This initiative may be a lower priority item given that recent improvements at the SSTP provide capacity for liquid sludge from the NETP to be hauled to the SSTP for dewatering.

- Due to regional contaminant loading to the Vermillion River, the LDEQ has imposed a hold on new and additional contaminant loading to the river. Simultaneously, population growth and development within the LUS service area has increased, and therefore wastewater flows to the LUS WWTPs have also increased. As a confluence of these factors, LUS should consider a treatment process evaluation of the four WWTPs be completed to identify the risks that LUS faces with respect to meeting LPDES loading limits and improvements which may reduce LUS loading to the river. The evaluation should specifically consider long-term capacity needs of the LUS wastewater utility and future permit limits, including consideration of nutrient reduction requirements. LUS initiated discussions about the scope of such evaluations in 2023.
- LUS is well organized and structured in its approach to implementing its CMOM program and addressing the requirements of the AO. LUS has leveraged its in-house staff and contractor resources to complete work efficiently. It is important that cleaning, inspection, and rehabilitation of the wastewater collection system be continued to comply with the requirements of the AO. The rate of such work needs to continue meeting the required 10 percent per year. LUS exceeded this requirement in 2020, 2021, 2022, and 2023. LUS is on track or ahead of the compliance schedule for sewer and manhole repair work stipulated in the AO.
- LUS is in the first half of the total compliance period for addressing the sewer cleaning and inspection requirements under the AO. LUS should continue closely tracking and monitoring costs incurred to date and use that data to consider a range of scenarios that can be used to inform long-term decision making regarding the total cost of compliance and funding needs.
- The CMOM program implemented in response to the AO has established a framework for programmatic proactive maintenance of LUS's collection system assets. Proactive maintenance can result in extended asset life and potentially reduce the likelihood and duration of unexpected downtime or failures. Less than 0.5% of total sewers and manholes in the system were rehabilitated in 2023. To further efforts to implement its CMOM program, LUS could consider implementing a risk-based approach to further develop capital improvement planning strategies to prioritize renewal and replacement of aging infrastructure over its anticipated service life.
- Due to the need to plan for ongoing development throughout its service area, LUS began a Wastewater Master Plan focused on the collection system in 2023. The master plan effort includes flow metering, development of a wastewater collection system hydraulic model, evaluation of capacity restrictions, and identification of long-term collection system capacity improvements.

Communications System Observations and Recommendations

Based on the information and assumptions relied upon, as included within this Report, the general observations and recommendations for the Communications System are presented below.

- Based on visual inspection of facilities, records audit, and interviews of LUS Fiber staff, the LUS Fiber communication network is in good condition, maintained properly and in accordance with industry practices with the exception of the 2 batteries strings located at and supporting the LUS Fiber Headend. However, both battery strings are planned to be replaced in FY 2024.
- At the current customer levels, the Communications System generates sufficient revenues to meet operating and maintenance expenses, debt service, capital improvements, inter-utility loan payments, imputed taxes, and all other financial obligations, with a sufficient profit margin to allow the Communications System to spend [redacted] per year on continued network expansion.
- LUS Fiber has received multiple federal and state grants and established local parish partnerships to extend the network to unserved and underserved surrounding parishes. A portion of LUS Fiber's future revenue growth is based on its ability to expand into nearby unserved and underserved areas. LUS Fiber is using these federal and state broadband infrastructure grants to expand its territory and further grow its customer base. LUS Fiber has projected increases in customers and revenues resulting from these system expansions and provided those projections to Burns & McDonnell for inclusion in the continuing disclosure projections. These projections could potentially be higher or lower depending on market conditions and take rates. LUS Fiber is moving forward with current grants and potential future BEAD funding. LUS Fiber will continue to analyze all grants on an annual basis to determine their financial viability with changing labor and material costs.
- LUS Fiber is expanding into new parishes through the use of grants and other parish contributions. As the system expands outside of Lafayette, operating expense will increase proportionately. LUS Fiber will need to actively expand its staff in FY 2024 and plan for increases in operating expenses in multiple categories. LUS Fiber has projected increases in expenses resulting from these system expansions and provided those projections to Burns & McDonnell for inclusion in the continuing disclosure projections.
- LUS Fiber will need to closely monitor its cash position as it builds out its system expansion using the federal, state, and other parish contributions in FY 2024 and FY 2025. The federal and state grants are generally paid upon submission of reimbursement requests or milestone completions. Based on information provided to Burns & McDonell, LUS Fiber is already closely managing these project costs and its funding sources.

- [redacted]
- [redacted]
- LUS Fiber is currently being led by Interim Director Jeffrey Stewart who also serves as the current Utilities Director for LUS. He succeeds the previous Director Ryan Meche who left LUS Fiber in January 2024. LUS Fiber is actively searching for a permanent Director and has brought in a consultant, Teles Fremin with CTC Technology & Energy, who previously served as the Interim Director for LUS Fiber prior to Mr. Meche's appointment as Director to assist Mr. Stewart and evaluate day to day functions for improvement. A new LUS Fiber System Director is expected to be hired and begin within the next month.
- [redacted] Based on these future hires, LUS Fiber will continue to reevaluate the current business structure and will consider realignment and/or reassignment of certain components of the business to better position the company moving forward.
- [redacted]
- [redacted]

Revenue Bond History and Ratings

LUS, LUS Fiber, and LPPA have issued and successfully paid its bond holders for over 70 years. A summary of the outstanding bonds at the end of FY 2023 is presented in Table ES-1. The Series 2012

Bonds were all refunded at the beginning of FY 2022 in November 2021 with the Series 2021 Bonds. The Series 2021 Bonds were only used to refund the existing 2012 Bonds. The Series 2021 Bonds have the same terms but with lower interest rates. The LUS Series 2023 Bonds were issued on November 15, 2023.

Table ES-1: LUS, LPPA, and LUS Fiber Outstanding Bond Summary

Entity	Date Issued	Authorized Amount	Application of Proceeds
LUS	2017	$59,465,000	Majority refunding of 2010 Bonds
LUS	2019	$58,065,000	Additions, extensions, and improvements to the Utilities System.
LPPA	2015	$29,035,000	Refunded $28,325,000 million of the 2007 Bonds
LUS Fiber	2015	$91,600,000	Refunded $96,855,000 of the Series 2007 Bonds
LUS	2021	$78,415,000	Advanced refunding of the 2012 Bonds
LPPA	2021	$38,755,000	Advanced refunding of the 2012 Bonds. 2012 Bonds were used for the Installation of MATS equipment, SNCR, and other improvements to Rodemacher Unit 2
LUS Fiber	2021	$14,140,000	Advanced refunding of the 2012 Bonds. 2012 Bonds were used for Improvements to the Communications System to provide retail telephone, CATV, and Internet service city residents
LUS	2023	$50,000,000	Additions, extensions, and improvements to the Utilities System.

Source: LUS

The most recent bond ratings for debt issuances are included in Table ES-2. The rating agencies typically review LUS and the City's credit rating with each debt issue. If the City or LUS has not recently issued debt (e.g. within a two-year period) the agencies will perform a review and surveillance of the City and LUS's performance to update their credit ratings. The most recent LUS, LUS Fiber, and LPPA bond ratings affirmation date for S&P was on September 29, 2023. Moody's last affirmation date for LUS was October 4, 2023 and October 13, 2021 for LUS Fiber and LPPA.

Table ES-2: Recent Bond Ratings

Bond Type	S&P Date of Rating or Affirmation	S&P Rating	Moody's Date of Rating or Affirmation	Moody's Rating
LUS: Utilities Revenue Bonds 2023	9/29/2023	AA-	10/4/2023	A1
LUS: Utilities Revenue Bonds 2021	9/29/2023	AA-	10/4/2023	A1
LPPA: Electric Revenue Refunding Bonds 2021	9/29/2023	AA-	10/13/2021	A1
Communications System: Revenue Refunding Bonds 2021	9/29/2023	A+	10/13/2021	A2
LUS: Utilities Revenue Bonds 2019	9/29/2023	AA-	10/4/2023	A1
LPPA: Electric Revenue Refunding Bonds 2015	9/29/2023	AA-	10/13/2021	A1
Communications System: Revenue Refunding Bonds 2015	9/29/2023	A+	10/13/2021	A2

Source: LUS, Moody's, S&P

1.0 INTRODUCTION

1.1 Introduction

The Lafayette Consolidated Government ("LCG," "City," or "City of Lafayette") retained Burns & McDonnell Engineering Company ("Burns & McDonnell") as its Consulting Engineer. LCG operates two departments, Lafayette Utilities System ("LUS") and its communications system known as LUS Fiber.

The Lafayette Utilities System ("LUS") Electric, Water, and Wastewater Systems (collectively the "Utilities System") General Bond Ordinance, and Communications System (also referred to as "LUS Fiber") General Bond Ordinance (collectively, the "Bond Ordinances") set forth specific duties and responsibilities of the Consulting Engineer, which include advising LUS on its appointment of a Chief Operating Officer, providing continuous engineering counsel to the Lafayette City-Parish Consolidated Government (Lafayette Consolidated Government or "LCG") in connection with operations of the Utilities System and Communications System, advising on rate revisions, and preparing an annual comprehensive report (specifically, this Consulting Engineer's Comprehensive Annual Report or "Report") on the operations of LUS and LUS Fiber after the close of each fiscal year ("FY").

This section of the Report describes the responsibilities of the Consulting Engineer with respect to the development of a Comprehensive Annual Report for the Utilities System and Communications System. The analyses and investigations completed by Burns & McDonnell in the performance of its due diligence review and assessments of LUS and LUS Fiber are similar to prior reviews conducted by other firms. Therefore, the organization, content, conclusions, and recommendations contained within this Report are similar to previous reports. LCG operates on a fiscal year, beginning November 1 and ending on October 31 of the following year. Unless otherwise stated, all data in this Report is presented on a FY basis.

1.2 Requirements of Bond Ordinances

Utilities System and Communications System outstanding bonds, presented in Table ES-1, are governed by nearly identical Bond Ordinances. The Utilities System is governed by Article VII-Covenants of the Issuer of the Utilities System General Bond Ordinance. The Communications System is governed by Article VIII-General Covenants of the Issuer of the Communications System General Bond Ordinance. The Consulting Engineer is governed by Article VIII-Consulting Engineer of the Utilities System General Bond Ordinance and Article IX-Consulting Engineer of the Communications System General Bond Ordinance. These articles are pertinent to the content of this Report. A summary of each article is described in the following subsections of this report.

1.2.1 Lafayette Utilities System – Article VII

LUS must comply with Article VII of the Utilities System General Bond Ordinance which lists 12 covenants. The 12 covenants that LUS is required to meet are listed below.

- Section 7.1 – Operation Covenant where, among other things, the Issuer (LUS) agrees to operate the Utilities System in a businesslike manner.
- Section 7.2 – Maintenance of Utilities System, Disposition where, among other things, the Issuer agrees to maintain the Utilities System and all parts thereof in good condition and will operate the same in an efficient and economical manner.
- Section 7.3 – No Competitive Facilities, the Issuer shall not hereafter construct, acquire, or operate any plants, structures, facilities, or properties which will provide like services of the utility system in the Issuer and the areas currently served by the respective systems in competition with and not as part of the Utilities System unless such construction, acquisition, or operation, in the judgement of the Issuer, does not materially impair the ability of the Issuer to comply with Section 5.1.
- Section 7.4 – Obligation to Connect Sewerage Users where, among other things, the Issuer agrees to require every owner, tenant, or occupant of each lot or parcel of land to connect with the Utilities system and to cease to use any other method for the disposal of sewage, sewage water, or other polluting matter.
- Section 7.5 – No Free Service where, among other things, the Issuer will not permit free water, electricity, or sewage service to be supplied by the Utilities System.
- Section 7.6 – Operating Budget where, among other things, before the first day of each FY the Governing Body shall prepare, approve, and adopt in the manner prescribed by law … a detailed budget of the Revenues, Bond Service Requirement, and Cost of Operations and Maintenance (“O&M”) for the next succeeding FY.
- Section 7.7 – Rate Covenant where, among other things, the Issuer will fix, charge, and collect such rates, rentals, fees, and charges for the use of and for the services and products provided by the Utilities System. The Issuer shall maintain a 1.0 debt service coverage ratio (“DSCR”).
- Section 7.8 – Books and Records where, among other things, the Issuer shall keep separately identifiable financial books, records, accounts, and data concerning the operation of the Utilities System.
- Section 7.9 – Reports and Annual Audits where, among other things, the Issuer shall require that an annual audit of the accounts and records with respect to the Utilities System be completed as soon as reasonably practicable at the end of the FY by a qualified independent certified public accountant.
- Section 7.10 – Insurance and Condemnation Awards where, among other things, the Issuer shall

carry adequate fire, windstorm, explosion, and other hazard insurance on the components of the Utilities System. The Issuer may, upon appropriate authorization by its Governing Body, self-insure against such risks on a sound actuarial basis.

- Section 7.11 – Enforcement of Collections where, among other things, the Issuer will diligently enforce and collect the fees, rates, rentals, and other charges for the use of the products, services, and facilities of the Utilities System.
- Section 7.12 – Additions to Utilities System where, among other things, the Issuer may add to the Utilities System any facilities or equipment purchased, acquired, or constructed for the purpose of improving or renovating any element of the then-existing Utilities System.

1.2.2 Lafayette Utilities System – Article VIII

Article VIII of the Utilities System General Bond Ordinance lists three requirements of the Consulting Engineer. These requirements are listed below.

- Section 8.1 – Consulting Engineer, where the Issuer shall retain a Consulting Engineer for the purpose of providing the Issuer immediate and continuous counsel and advice regarding the Utilities System. It shall be the further duty of the Consulting Engineer to advise the Issuer in its appointment of a Chief Operating Officer of the Utilities System and the Issuer agrees that it will not appoint anyone as Chief Operating Officer that has not been approved by the Consulting Engineer.
- Section 8.2 – Comprehensive Annual Report, where the Consulting Engineer shall prepare within 180 days after the close of each FY a comprehensive report… upon the operations of the Communications System and the Utilities System during the preceding year, the maintenance of the properties, the efficiency of the management of the property, the proper and adequate keeping of books of account and record, the adherence to budget and budgetary control provisions, the adherence to all the provisions of the Ordinance, and all other things having a bearing upon the efficient and profitable operations of the Communications System and the Utilities System, and shall include whatever criticism of any phase of the operation of the Communications System and the Utilities System the Consulting Engineer may deem proper, and such recommendation as to changes in operation and the making of repairs, renewals, replacements, extensions, betterments, and improvements as the Consulting Engineer may deem proper including recommended changes in organization, pay scales, and risk management practices. Copies of such report shall be placed on file with the Chief Operating Officer and shall be open to inspection by any Owners of any of the Bonds. Such report shall also contain the Consulting Engineer's recommendations as to personnel practices and policy and its analysis of the ability of the Utilities System to function in the present and forecasted environments.

- Section 8.3 – Recommendation as to Rate Revision, where it shall further be the duty of the Consulting Engineer to advise the Issuer as to any revision of rates and charges, and the Issuer agrees to make no downward revision in it rates and charges for services (except fuel adjustment charges), which are not approved by the Consulting Engineer.

1.2.3 LUS Fiber – Article VIII

Article VIII of the Communications System General Bond Ordinance lists nine covenants of the Issuer. These covenants are listed below.

- Section 8.1 – Operation Covenant where, among other things, the Issuer agrees to operate the Communications System and Utilities System in a businesslike manner.
- Section 8.2 – Maintenance of Communications System, Disposition where, among other things, the Issuer agrees to maintain the Communications System and Utilities System and all parts thereof in good condition and will operate the same in an efficient and economical manner.
- Section 8.3 – Operating Budget where, among other things, before the first day of each FY the Governing Body shall prepare, approve, and adopt in the manner prescribed by law…a detailed budget of the Revenues, Bond Service Requirement, and Cost of O&M for the next succeeding FY.
- Section 8.4 – Rate Covenant where, among other things, the Issuer will fix, charge, and collect such rates, rentals, fees, and charges for the use of and for the services and products provided by the Communications System. The Issuer shall maintain a 1.0 DSCR. Should there be a Credit Event, the Issuer will fix, charge, and collect such rates, rentals, fees, and charges for the use of and for the services and products provided by the Utilities System to provide sufficient revenues to pay the Communications System debt service.
- Section 8.5 – Books and Records where, among other things, the Issuer shall keep separately identifiable financial books, records, accounts, and data concerning the operation of the Communications System.
- Section 8.6 – Reports and Annual Audits where, among other things, the Issuer shall require that an annual audit of the accounts and records with respect to the Communications System and Utilities System be completed as soon as reasonably practicable at the end of the FY by a qualified independent certified public accountant.
- Section 8.7 – Insurance and Condemnation Awards where, among other things, the Issuer shall carry adequate fire, windstorm, explosion, and other hazard insurance on the components of the Communications System and Utilities System. The Issuer may, upon appropriate authorization by its Governing Body, self-insure against such risks on a sound actuarial basis.

- Section 8.8 – Enforcement of Collections where, among other things, the Issuer will diligently enforce and collect the fees, rates, rentals, and other charges for the use of the products, services, and facilities of the Communications System and Utilities System.
- Section 8.9 – No Free Service where, among other things, the Issuer will not permit free service to be supplied by the Communications System and Utilities System.

1.2.4 LUS Fiber – Article IX

Article IX of the Communications System General Bond Ordinance lists two requirements of the Consulting Engineer which are listed below.

- Section 9.1 – Consulting Engineer. The Issuer shall retain a Consulting Engineer for the purpose of providing the Issuer immediate and continuous counsel and advice regarding the Communications System and the Utilities System.
- Section 9.2 – Comprehensive Annual Report, where the Consulting Engineer shall prepare within 180 days after the close of each FY a comprehensive report… upon the operations of the Communications System and the Utilities System during the preceding year, the maintenance of the properties, the efficiency of the management of the property, the proper and adequate keeping of books of account and record, the adherence to budget and budgetary control provisions, the adherence to all the provisions of the Ordinance, and all other things having a bearing upon the efficient and profitable operations of the Communications System and the Utilities System and the Utilities System the Consulting Engineer may deem proper, and such recommendation as to changes in operation and the making of repairs, renewals, replacements, extensions, betterments, and improvements as the Consulting Engineer may deem proper including recommended changes in organization, pay scales, and risk management practices. Copies of such report shall be placed on file with the Chief Operating Officer and shall be open to inspection by any Owners of any of the Bonds. Such report shall also contain the Consulting Engineer's recommendations as to personnel practices and policy and his analysis of the ability of the Utilities System to function in the present and forecasted environments and shall include whatever criticism of any phase of the operation of the Communications System.

1.3 Purpose of the Report

The purpose of the Report is to fulfill the Utilities System General Bond Ordinance Article VIII and the Communications System General Bond Ordinance Article IX as described above and to comply with Electronic Municipal Market Access ("EMMA") reporting requirements. EMMA is a resource for investors and is operated by the Municipal Securities Rulemaking Board ("MSRB"). The MSRB is a primary regulator of municipal markets. The MSRB establishes rules that securities firms, banks, and municipal advisors must follow when engaging in municipal securities transactions and advising investors and state and local governments. Section 8 – Continuing Disclosures, with Section 9 – Continuing Disclosures-Utilities System, Section 10 – Continuing Disclosures-Lafayette Public Power Authority (“LPPA”), Section 11 – Continuing Disclosures- Communications System, and Section 12 – Financial and Statistical Data meet the EMMA reporting requirement.

1.4 Report Organization

Outstanding debt obligations are supported by two separate revenue pledges. The electric, water, and wastewater utility revenues of the Utilities System are pledged to meet debt service obligations associated with the Utilities System Series 2012, 2017, 2019, 2021, and 2023 Bonds. Communications System revenues are pledged to meet debt service obligations associated with the Communications System Series 2015 and 2021 Bonds. The Utilities System, Communications System, and LPPA Series 2012 Bonds were refunded with the Series 2021 Bonds in FY 2022 on November 18, 2021. Given these two distinct pledges, the Report has been organized as presented below.

- Section 1 – Scope of Review, as presented within this section.
- Section 2 – Governance, Organization, Management, and Revenue Pledge describes the organizational structure and management team of LUS, which oversees the operation of the Utilities System and Communications System, including the governance and shared services provided by LCG.
- Section 3 – Utilities System provides an overview of the combined electric, water, and wastewater operations that comprise the Utilities System, including historical financial performance.
- Section 4 – Electric System provides an in-depth review of Electric System operations, system condition, rate comparisons, performance benchmarking, and financial performance and contribution to the Utilities System revenue pledge.
- Section 5 – Water System provides an in-depth review of Water System operations, system condition, rate comparisons, and financial performance and contribution to the Utilities System revenue pledge.
- Section 6 – Wastewater System provides an in-depth review of Wastewater System operations, system condition, rate comparisons, and financial performance and contribution to the Utilities System revenue pledge.
- Section 7 – Communications System provides an in-depth review of the LUS Fiber Internet, telephone, and cables businesses including an assessment of market share, service offerings, price competitiveness, and financial performance in support of the Communications System revenue pledge.

- Section 8 – Continuing Disclosure section providing an overview of EMMA and the required continuing disclosures.
- Section 9 – Continuing Disclosure section presenting updated financial information similar to that presented in official statements of outstanding bond issues for the Utilities System.
- Section 10 - Continuing Disclosure section presenting updated financial information similar to that presented in official statements of outstanding bond issues for LPPA.
- Section 11 - Continuing Disclosure section presenting updated financial information similar to that presented in official statements of outstanding bond issues for the Communications System.
- Section 12 - Continuing Disclosure section presenting relevant financial and statistical information.

1.5 Statement of Limitations

Burns & McDonnell performs or provides business, technology, engineering, and consulting services. Burns & McDonnell does not provide legal, accounting, or tax advice. The reader is responsible for obtaining independent advice concerning these matters. That advice should be considered by reader, as it may affect the content, opinions, advice, or guidance given by Burns & McDonnell. Further, Burns & McDonnell has no obligation and has made no undertaking to update these materials after the date hereof, notwithstanding that such information may become outdated or inaccurate. These materials serve only as the focus for consideration or discussion; they are incomplete without the accompanying oral commentary or explanation and may not be relied on as a stand-alone document.

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2.0 GOVERNANCE, ORGANIZATION, AND MANAGEMENT

2.1 Governance

The electorate of the Parish and the City adopted the initial Home Rule Charter ("Charter") to consolidate the City and Parish governmental functions as of 1996. The Charter defined the LCG departmental structure. LCG manages and operates the Utilities System and Communications System through its departmental structure. The Utilities Department is responsible for the Utilities System while the Communications Department is responsible for the Communications System management and operations. Other LCG departments perform certain functions to and provide support for LUS operations, such as the Chief Administrative Officer, which includes human resources, the Office of Finance and Management, which includes accounting, budget management, purchasing and property management, and risk management and group insurance, and the Legal Department. The City owns the Utilities System and the Communications System assets. LCG operates on a fiscal year beginning November 1 and ending on October 31 of the following year.

On December 8, 2018, voters of the Parish and the City ratified amendments to the Charter which modified the governance structure. LCG is currently governed by a Mayor-President and City Council and Parish Council members that are elected by the Parish and the City to four-year terms of office. The Lafayette City Council consists of five members who are serving as the governing authority for the City and the Lafayette Parish Council consists of five members who are serving as the governing authority for the Parish. The City Council and the Parish Council, jointly, serve as the governing authority for LCG. The Mayor-President leads LCG along with the City Council and Parish Council. The City Council is the governing authority for LUS, LPPA, and LUS Fiber. The Mayor-President appoints the Director of Utilities and Communications, with such appointment for the Director of Utilities subject to ratification by the City Council. Certain provisions provided by LCG to the City and Parish are shared such as finance, accounting, administration, human resources, legal, and insurance. The Mayor-President and Chief Administrative Officer supervise the administration of departments, offices, and agencies of LCG. Certain departments of LCG are involved in day-to-day support of the management of LUS. The current members of the City Council and Parish Council are presented in Table 2-1.

Table 2-1: City Council and Parish Council Members

City Council	Parish Council
Elroy Broussard	Bryan Tabor
Andy Naquin	Donald Richard
Liz Hebert	Ken Stansbury
Thomas Hooks	John J. Guilbeau
Kenneth Boudreaux	Abraham Rubin, Jr.

The City Council is the governing authority of LPPA. LPPA is a political subdivision of the State of Louisiana and was created in 1976 for the purpose of financing electric generation facilities to provide power to the City's electric system. LPPA provides the output of these generating facilities to LCG through a wholesale power sales agreement. The only generating facilities owned by LPPA include Rodemacher Unit 2 which is described in more detail in the Electric Utility Section of this Report.

The City is the owner of the Electric System (including generation, transmission, and distribution facilities), the Water System (including supply, treatment, distribution, and storage facilities), and the Wastewater System (including wastewater collection and treatment facilities) (collectively, the Utilities System), as well as the Communications System. The Electric Utility, Water System, and Wastewater System are financed by the Utilities System revenue bonds.

The Communications System offers an array of services in the competitive wholesale and retail markets including fiber leases, wholesale broadband, and retail customer services. The Communications System offered a new [redacted] in 2019. In the retail market, the Communications System offers the "triple play" of services. The "triple play" is a common term in the industry that refers to cable television ("CATV"), telephone, and Internet services. Additional internet content streaming services are now offered as well. The backbone of the system includes a [redacted] fiber backbone with direct connections to national, major Tier 1 broadband providers. The retail portion of the Communications System includes over [redacted] of overhead and underground fiber lines along City streets, along with associated equipment. The system also consists of a major headend facility, including satellite dishes and electronics, along with backup power and connection to at least [redacted] long haul connections with major Internet carriers. The Communication System consists of a separate Communications Services Enterprise Fund with a separate and distinct set of accounts, funds, and bond pledges. The Communication System is financed by the Communication System revenue bonds.

2.2 Operating and Capital Budgeting

The budgeting process begins in early April of each year with each LCG department preparing and submitting their proposed operating and capital budgets. Many departments begin working on their own budgets prior to April. By the end of July, the administration of LCG presents a proposed budget to the City Council and Parish Council for consideration. The City Council and Parish Council then hold a series of budget review meetings where changes may be considered to the proposed budget. Per the Charter requirements, the budget must be presented to the City Council and Parish Council at least 90 days prior to the beginning of each FY and adopted no later than the second to last regular meeting of the FY. A final budget is typically adopted in late September.

The operating portion of the budget contains projections of revenues and expenses. Each division within LUS and LUS Fiber estimates their expenses for the upcoming FY and submits their estimates to LUS and LUS Fiber management. LUS and LUS Fiber management then compile the projections for each division and submit the document to LCG. Each year, the Utilities System and Communications System develop a five-year capital improvement program (CIP). The CIP is reviewed, updated, and budgeted annually. These budgets are normally finalized after the completion of this Report. Forecasts of revenues, expenses, and capital contained within the continuing disclosures within this report are based on previous budgets and projections which are subject to change during the budgeting process.

2.3 Insurance

The Risk Management Division within the Department of Finance is the insurance company for LCG. The function of the Risk Management Division is to protect City resources by minimizing risks and stabilizing insurance costs in an economical manner that preserves assets and protects against accidents or loss. The LCG Insurance Company provides coverage in the following areas: Group Health/Life, Property & Casualty Claims, Safety/Loss Control, and City-Parish-Nurse Wellness.

The Group Health/Life Section is self-insured. LCG has a flex funded plan for life insurance. LCG also has Flexible Spending Accounts and retirement preparation.

The Property & Casualty Claims section is self-insured for all lines of coverage including auto and general liability, error and omissions, and property and is outsourced to a third-party administrator. Workers' compensation is also outsourced to a third-party administrator.

The Safety/Loss Control section identifies potential risks to LCG employees and makes recommendations on eliminating or decreasing these risks. This section reviews all job-related injuries and vehicle accidents, facilitates safety meetings, conducts job site inspections, and inspects LCG property.

The Communications System has its own insurance policy related to auto liability and workers' compensation. According to the LCG Risk and Insurance Manager, Ms. Suzanne Siner, LCG is in compliance with Governmental Accounting Standards Board 10: Reporting for Risk Financing and Related Issues for public entities. Table 2-2 shows five years of historical insurance-related expenditures and recoveries from the Risk Management Fund for the Utilities System and Communications System. In the case that another party caused the accident or injury, the Recovery shown in Table 2-2 represents money received from the responsible party.

Table 2-2: Utilities System and Communications System Insurance Transactions

Utilities System	2019	2020	2021	2022	2023
Payments	$803,662	$791,194	$1,441,621	$1,342,636	$945,992
Recovery	222,171	211,855	355,819	200,642	213,379
Net Transactions	$581,491	$579,339	$1,085,802	$1,141,994	$732,613
Communications System					
Payments	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Recovery	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Net Transactions	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Source: LUS

2.4 Legal

2.4.1 Northeast Electrical Substation

Presently, there are five lawsuits for expropriation of permanent utilities servitudes pending in the 15th Judicial District Court. Each of these expropriation suits was brought to acquire a 15-foot permanent utilities servitude required for the Northeast Electrical Substation and Transmission/Distribution Systems and Necessary Utilities Project. LUS filed an additional suit to expropriate the necessary servitude from one party. LUS has recently paid $565,145 to aquire title to the five servitudes.

2.5 Emergency Events and Reimbursements

Local governments like LUS, and certain types of non-profit organizations, are eligible to receive reimbursements for natural disasters such as hurricanes, flooding, tornadoes, and other events. LUS is eligible to receive reimbursement from the Federal Emergency Management Agency ("FEMA") and the Louisiana State Governor's Office of Homeland Security and Emergency Preparedness ("GOHSEP"). When a natural disaster occurs, LUS organizes, performs, and pays for the prompt restoration of utility service and clean up. Often, this includes hiring and paying contractors. After the event, LUS submits receipts and invoices to FEMA for reimbursement. The GOHSEP acts as the auditor and approves expenses eligible for reimbursement. Those natural disasters for which LUS has recently experienced and is awaiting reimbursement from FEMA and GOHSEP are described in the following subsections.

2.5.1 Hurricane Gustav, 2008

Hurricane Gustav made landfall September 1, 2008, near Cocodrie, Louisiana (located southwest of the City). Lafayette Parish sustained major damage as a result of the strong winds and rainfall associated with the storm. Approximately 40 percent of the retail electric customers of LUS lost power during the storm; however, all services were restored within a 72-hour time frame. When Hurricane Gustav hit, LUS hired a contractor, J.W. Didado, to assist with the utility restoration and clean-up. LUS paid J.W. Didado approximately $1 million. Other utilities also paid J.W. Didado at the same time, and because of anomalies in the reimbursement documentation, GOHSEP conducted an in-depth analysis. GOHSEP, through their auditing process, filed an audit report on March 9, 2016, stating that approximately $660,000 of the expenses of LUS are eligible for reimbursement. The report states that certain expenses were ineligible costs (mobilization, demobilization, and standby time) and overbilled labor and equipment. LUS is continuing to cooperate with GOSHEP/FEMA. The report recommended that LUS should implement a method to identify the use of contractors by multiple sub grantees during the same time periods. LUS recorded a deferred debit on the balance sheet of $1,868,215. As of October 31, 2023, LUS is awaiting reimbursement of $239,762 and the Communications System had a receivable of [redacted]

2.5.2 Flooding of 2016

In August 2016, southern Louisiana experienced major flooding, which impacted the Utilities and Communications Systems operations. The Water, Wastewater, and Communications Systems experienced only minor disruptions in service and minimal damage to system infrastructure. The Communications System did not experience any major outages. The Water System experienced flooding at the Jim Love Water Plant ("JLWP") due to flood water rising past the elevation of the wells' sanitary seals. The JLWP was shut down for a brief period so that testing could determine if the well water was affected by flood waters. Testing showed that the water was safe, and the Water System was able to meet demand even under the flood conditions. However, this event prompted many repairs and rehabilitation efforts at the plant. Updates implemented at the JLWP include FEMA recommended steel shipping doors to prevent water entering the filter gallery, building rehabilitation, and roof repair. LUS recorded a deferred debit on the balance sheet of $630,364. The claim is currently being processed by GOHSEP. During 2019, LUS was reimbursed $497,611 however no additional reimbursement was made in 2020, 2021, or 2022. As of October 31, 2023, LUS is awaiting reimbursement of $214.

2.5.3 Hurricane Barry, 2019

Approximately 5,000 homes were affected by Hurricane Barry. Within two days, LUS was back to normal operations. LUS recorded a deferred debit on the balance sheet of $1,031,267. The claim is currently being processed by GOHSEP. During 2021, LUS was reimbursed $526,469. As of October 31, 2023, LUS is still awaiting reimbursement of $324,794.24. The Communications System experienced no major outages as part of Hurricane Barry. However, there were repairs needed of several access cables to restore service to several hundred customers in addition to power supply failures. The Communications System returned to normal operation within three days.

2.5.4 Hurricane Laura, 2020

Hurricane Laura hit on August 27, 2020, near Cameron, LA as a Category 4 storm. During the event, LUS had nearly 15,000 customers impacted and restored service in approximately one and one-half days. The total damage caused by Laura was approximately $2.50 million with $1.99 million in expenses incurred by LUS and LUS Fiber in FY 2020. The majority of the damages caused by the storm were on the electric system, however some costs were borne by water, wastewater and fiber. As of October 31, 2023, LUS is awaiting reimbursement of $920,713.

2.5.5 Hurricane Delta, 2020

On October 9, 2020, Hurricane Delta made landfall as a Category 2 storm near Creole, LA. Lafayette Parish sustained major damage as a result of strong winds and heavy rainfall affecting almost 70 percent of LUS customers. LUS customers' services were restored within three and one-half days by 400+ LUS employees and the assistance of over 300 mutual aid partners and contractors. The majority of the damages caused by the storm were on the electric and fiber systems with minor issues in water and wastewater. Hurricane Delta caused approximately $7.1 million in restoration expenses for LUS and LUS Fiber with $4.2 million incurred in FY 2020. As of October 31, 2023, LUS was awaiting reimbursement of $5,081,136. As of October 31, 2023 the Communications System had a receivable of [redacted]

2.5.6 Winter Storm, 2021

In February of 2021, the entire central U.S., including the City of Lafayette, experienced a significant winter storm resulting in abnormally low temperatures. The winter storm did not result in major damage to the system; however, the central U.S., including LUS, experienced abnormally high market power costs. LUS's generating units were online during the storm providing a hedge against extreme increases in power cost for LUS's electric utility. While LUS's power supply was well insulated compared to many utilities, the wholesale cost of power during February was higher than normal and was recovered through the fuel cost rate rider.

2.5.7 Hurricane Ida, 2021

On August 29, 2021, Hurricane Ida made landfall as a Category 4 storm near Port Fourchon, LA (approximately 60 miles SE of Houma). The Coastal Weather Research Center indicated Lafayette, LA was directly in the predicted path, as of August 27th, creating an immediate threat to the health and safety of the general public and requiring emergency response and protective measures. LUS activated its Major Storm Emergency Procedures Plan which includes relocation to the Cajundome for LUS storm teams and mutual aid partners utilized in the preparation, response and restoration efforts. As of October 31, 2023, LUS is awaiting reimbursement of $1,300,485.

2.6 Service Territory

LUS provides electric, water, and wastewater utility service to customers primarily within the City limits. LUS also services some electric, water, and wastewater customers outside the City limits but within the Parish limits. As of October 31, 2023, LUS served 71,521 electric accounts, 59,076 water accounts, and 47,446 wastewater accounts.

LCG has franchise agreements and street lighting agreements with the City of Broussard and the City of Youngsville for electric service. LUS provides street lighting service to both cities and provides services to new residential and commercial developments within these cities.

LUS serves retail water customers inside and outside the City limits while providing wholesale water for other parish water distribution companies which are described in more detail later in this report.

LUS serves wastewater customers inside and outside the City limits. In addition, LUS serves localized (e.g., residential subdivision) packaged wastewater treatment systems.

The Communications System services are generally offered within the City limits, but have expanded to new areas outside the City. At the end of October 2023, the Communications System served approximately [redacted] wholesale accounts and over [redacted] retail accounts with CATV, telephone, Internet, or some combination of the three. The Communications System continues to show notable positive customer growth each year. The Communications System attained franchise status in November 2017 throughout the Parish and offers communications service to the City of Broussard, City of Youngsville, City of Carencro, and unincorporated areas in the Parish. The Communications System is continuing to build out targeted areas within the St. Martin and Iberia parishes. These buildouts have been funded by previously awarded grants to build out the Communications System to serve new unserved and underserved areas in neighboring Parishes.

2.7 Management and Organization

The Utilities System is a department of LCG and is managed and operated in accordance with the Charter and provisions of the current Utilities System General Bond Ordinance. The "Flow of Funds" set forth in the General Bond Ordinance specifies how to treat revenues and related margins resulting from LUS operations. Available margins, once O&M expenses have been paid, are first required to meet debt service and reserve fund obligations, then a formula is applied to determine amounts for capital improvements and replacements funding, and the payment amount to the City's General Fund as ILOT. The Lafayette Public Utilities Authority ("LPUA") historically approved LUS budgets and issued debt as approved by the Mayor-President and the former City-Parish Council. Beginning in January 2020, pursuant to Charter amendments approved by voters on December 8, 2018, the City Council assumed LPUA's responsibilities with respect to the Utilities System, in addition to approval of rates.

The Communications System is a department of LCG and is managed and operated in accordance with the Charter and provisions of the current Communications System General Bond Ordinance. The "Flow of Funds" set forth in the General Bond Ordinance specifies how to treat revenues and related margins resulting from Communications System operations. Available margins, once O&M expenses were paid, are first required to meet debt service and reserve fund obligations, then a formula is applied to determine amounts for capital improvements and replacements funding, and the Imputed taxes. Historically LPUA approved the Communications System budgets, and issued debt as approved by the Mayor-President and City-Parish Council. Beginning in January 2020, the City Council assumed LPUA's responsibilities with respect to the Communications System.

The Utilities Director and Communication System Director are both appointed by the Mayor-President with the Director of Utilities appointment subject to ratification by the City Council. The Consulting Engineer advises the LUS in its appointment of a Chief Operating Officer of the Utilities System, per the ordinance requirements, and fulfilled this role in FY 2021 as LUS evaluated candidates and selected Jeffrey Stewart for the position in early FY 2022.

2.7.1 LUS Organizational Structure

The Utilities System has eight functional areas reporting to the Utilities Director. These functional areas include Support Services, Customer Service, Environmental Compliance, Power Production, Electric Operations, Water Operations, Wastewater Operations, and Engineering.

LUS is managed by the Utilities Director. The Utilities Director is responsible for the management and operations of the LUS electric utility, water utility, and wastewater utility. More specifically, the Utilities

Director oversees and manages electric production and distribution, water production, treatment, and distribution, wastewater collection and treatment, utility engineering services, supervision of construction work for LUS, maintaining utility equipment in cooperation with the central garage, reading, billing, and collection of all utility meters, and other such activities as may be directed by the Mayor-President as necessary or incidental to the operation of LUS.

LUS and LCG selected the permanent Utilities Director, Jeffrey Stewart, in February 2022. Mr. Stewart graduated from the Louisiana State University with a B.S. in Electrical Engineering and has served as Utilities Director since February 2022. He has been employed by LUS for over 23 years and served as Engineering & Power Supply Manager prior to his appointment as Director. Mr. Stewart serves on the Board of Directors of the Louisiana Energy & Power Authority on behalf of the City of Lafayette and is a registered Professional Engineer in the state of Louisiana.

Division managers reporting to the Utilities Director are presented below along with their credentials.

- Karen Hoyt - Engineering & Power Supply Manager: Ms. Hoyt has over 17 years of experience at LUS and has been serving as Engineering & Power Supply Manager since May 2022. Ms. Hoyt holds a Bachelor of Science degree in Electrical Engineering and a Master of Business Administration degree and is a registered Professional Engineer in the state of Louisiana. In this position, Ms. Hoyt is responsible for the supervision of all day-to-day engineering activities including Civil Engineering, Power Marketing, System Engineering and Substation Engineering, Network Engineering, Environmental Compliance associated with power generation and North American Electric Reliability Corporation ("NERC") compliance.
- Alison Alleman – Customer & Support Services Manager: Ms. Alleman has over 24 years of experience at LUS and served as the Customer & Support Services Manager since 2020. She holds a Bachelor of Science in Finance degree and a Master of Business Administration degree from the University of Louisiana at Lafayette. She is responsible for various support and customer service functions within the Utilities Department including financial monitoring and planning, rates, revenue assurance, employee development, meter services, utility conservation, customer service, business support services, and administration support services.
- Tracy Mouton – Environmental Compliance Manager: Ms. Mouton has worked in the environmental field with the Utilities System for 31 years, serving as the Environmental Compliance Manager since July 2016. Her education includes a Bachelor of Science in Biology with a minor in chemistry from Jackson State University in Jackson, Mississippi. She also has a Master of Business Administration degree and is a Registered Environmental Manager. Ms. Mouton is responsible for ensuring

environmental compliance of all LUS business operations associated with water and wastewater operations.

- Gregory A. Labbé – Electric Operations Manager: Mr. Labbé has worked with LUS for 39 years and held several positions in the Electric Operations Section. Mr. Labbé is responsible for the day-to-day operation of the electric transmission and distribution system including Transmission and Distribution Operations, Field Operations, Energy Control, Substations and Communication, Facilities Management, and the Warehouse. Mr. Labbé is a graduate of T.H. Harris Technical School in Opelousas, Louisiana.
- Craig Gautreaux – Wastewater Operations Manager: Mr. Gautreaux has 40 years of experience in the civil engineering and wastewater operations industry (5 years with a private consulting firm, and 33 years with the Utilities System). Mr. Gautreaux has a master's degree in civil engineering and is responsible for the day-to-day operation of the Wastewater Systems including Wastewater Treatment and Wastewater Collection. Mr. Gautreaux was also responsible for the Water Systems through all of FY 2023 which included Water Production and Water Distribution and then transitioned those responsibilities to Trevor J. Carriere in January 2024.
- Trevor J. Carriere, P.E. – Water Operations Manager: Mr. Carriere has over 10 years of experience at LUS focused on civil engineering, water, and wastewater. He has been serving as Water Operations Manager since January 2024. In this position, Mr. Carriere is responsible for the supervision of all day-to-day activities of water production, treatment, and distribution at LUS. Mr. Carriere is a University of Louisiana at Lafayette graduate, where he was awarded a Bachelor of Science degree in Civil Engineering. He holds a Louisiana Professional Engineering License and class IV LADHH certifications in: Water Production, Water Treatment, Water Distribution, Wastewater Treatment, Wastewater Collection.

2.7.1.1 LUS Staffing

LUS reviews its overall staffing requirements annually and budgets overall staffing level in its annual budgetary process to continue to provide reliable and cost-effective services to customers. The LUS staffing levels by department have been relatively stable over the last several years and appear reasonable for the size and complexity of the organization. At the end of 2023 there were several vacancies across the organization with some departments having more vacancies than others, such as the Wastewater Operations group. The personnel tables by department are contained in the LCG 2023 Budget and the LCG 2024 Budget. Table 2-3 presents the number of employees by department at the end of FY 2023 as well as the budgeted number of employees in FY 2023 and FY 2024.

Table 2-3: LUS Number of Personnel by Department

	Personnel		
	October 31, 2023	2023 Budget	2024 Budget
Director's Office	2	2	2
Support Services	25	28	28
Customer Service	30	31	33
Environmental Compliance	18	18	18
Power Production	29	35	35
Electric Operations	85	97	97
Water Operations	59	68	71
Wastewater Operations	84	97	97
Engineering	78	81	81
Total Utilities System	410	457	462

Source: 2023 Budget, 2024 Budget, LUS Org Chart

2.7.2 LUS Fiber Organizational Structure

At the beginning of 20242023, Lafayette Mayor-President Monique Boulet named Jeffrey Stewart as LUS Fiber's new Interim Director. Mr. Stewart replaced Ryan Meche who was the previous LUS Fiber Director. Mr. Stewart is being supported by outside consultants until a permanent director can be appointed.

Since November 1, 2018, the Communications Director has been responsible for the Communications System operations and management. Communications System employees and facilities are organized separately from Utilities System operations; however, several services such as accounting, and reporting functions are shared among the Communications System and Utilities System. In accordance with the requirement to maintain separate Utilities System and Communications System funds, all costs associated with these services are accounted for separately.

The Communications System employs approximately [redacted] employees, reporting to 5 functional areas: Administration and Support, Operations, Warehouse, Business Support Services, and Engineering. Division managers are currently reporting to Jeffrey Stewart, the Interim Communications System Director.

2.7.2.1 LUS Fiber Staffing

The staffing table below reflects the fact that the Business Support Services division took over direct management of [redacted] customer service personnel in FY 2021. In the past, these positions were included in the LUS manning table, and LUS Fiber covered the cost of these positions through the Administrative and General expense line item in LUS Fiber's budget, in accordance with LCG's cost allocation plan. These positions were not included as LUS Fiber staffing counts in the previous years' projected budget, creating the appearance of staffing level above target levels. The Communications System is planning to fill many of the vacant positions over the next year and is utilizing contractors to support its existing staff.

Table 2-4: LUS Fiber Number of Personnel by Department

	Personnel		
	October 31, 2023	2023 Budget	2024 Budget
Administration & Support	[redacted]	[redacted]	[redacted]
Operations	[redacted]	[redacted]	[redacted]
Warehouse	[redacted]	[redacted]	[redacted]
Business & Customer Support Services	[redacted]	[redacted]	[redacted]
Engineering	[redacted]	[redacted]	[redacted]
Total Communications System	[redacted]	[redacted]	[redacted]

Source: 2023 Budget, 2024 Budget, LUS Org Chart

2.8 Employee Compensation Review

LUS and LUS Fiber annually administer employee performance reviews and salary planning. Salary adjustments take effect on November 1 of each year, with changes realized during the first full pay period of the new FY. Compensation parameters are associated with the job titles and job descriptions, which specify skill and responsibility levels of various employees throughout LUS and LUS Fiber. Like previous years, Burns & McDonnell conducted a review of compensation for various job descriptions within LUS and LUS Fiber. The review conducted for this CER update did not take into consideration other key benefits included in an overall compensation package such as job stability, sick leave benefits, and retirement benefits which can often overcome the differences between for-profit and not-for-profit entities competing for the same talent. The positions benchmarked are listed below.

- Electric Utility
  - Chief Electrical Engineer
  - Electrical Engineer III
  - Power Plant Technician
- Water and Wastewater Utility
  - Water/Wastewater Operations Manager
  - Water Plant/Waste Plant Operator
- Communications System
  - Fiber Optics Technicians

- Programmer Analyst
- Applications Support Specialist
- Systems Analyst

LUS is compensating its employees at levels below other employers in the State of Louisiana based on the review completed as part of the CER update. Within the electric, water, and wastewater utilities, the median regional salaries compared reasonably well with each LUS classification with most positions having a compensation rate within 10 to 20 percent of the regional median. Some of the difference in compensation between Lafayette and state averages could be attributed to the lower cost of living when compared to other larger cities in Louisiana such as New Orleans. Based on feedback from LUS, hiring and retaining electric linemen has been a challenge. However, LUS is working with regional schools to train and hire new staff.

Based on the review completed within the CER update, [redacted]

3.0 UTILITIES SYSTEM FINANCIAL REVIEW

3.1 System Description

LUS operates Electric, Water, and Wastewater Systems. The Electric System operates power generation, transmission, distribution, and customer assets. The Water System includes raw water production and treatment plants, distribution system, and customer assets. The Wastewater System includes sewage treatment plants, collection piping, and customer assets. This section of the Report provides a summary of the historical financial condition of LUS through the end of FY 2023.

3.2 Customers

LUS serves customers both within the City limits and outside the City. The Water System has wholesale agreements with several cities that are described later in this report. The Electric System has franchise agreements with the City of Broussard and City of Youngsville which allow LUS to provide service in those cities. The historical number of customers served by each utility is provided in Table 3-1. LUS has experienced modest growth over the last five years.

Table 3-1: Historical Utility Customers

Year	Electric	Water	Wastewater	Total
2019	68,495	58,316	45,623	172,434
2020	69,364	57,412	46,133	172,909
2021	70,096	57,891	46,681	174,668
2022	70,865	58,302	46,792	175,960
2023	71,521	59,076	47,446	178,043

Source: LUS Financial and Operating Statements

3.3 Historical Revenues

LUS generates revenues primarily from the sale of the utility services it provides. The electric utility represents approximately 76 percent of the revenues and costs of LUS while the water and wastewater utilities represent the remaining 24 percent. The electric historical revenues experienced a noticeable reduction in FY 2020 due to the COVID-19 Pandemic, however it should be noted that the revenue reduction was combined with a commensurate reduction in fuel and purchased power expenses. After FY 2020, revenues rebounded to historical levels in FY 2021. The electric utility experienced a large revenue increase in FY 2022 due to a 60% increase in fuel pass-through charges. In FY 2023, the cost of fuel decreased from FY 2022 levels resulting in lower pass-through revenue. Water and Wastewater revenues saw an increase due to newly adopted rate increases, adjustments made to previously under-registering meters, and drought conditions across the service area. The historical revenues by utility are presented in

Table 3-2 and include revenues from base rates, service charges, fuel charges, interest income, and other miscellaneous revenues.

Table 3-2: Historical Operating and Other Revenues

Year	Electric Revenues	Water Revenues	Wastewater Revenues	Total Revenues
2019	$179,965,886	$21,369,475	$32,038,772	$233,374,132
2020	$166,467,519	$21,696,556	$31,122,710	$219,286,785
2021	$179,851,903	$21,904,303	$31,768,322	$233,524,527
2022	$226,464,201	$22,964,906	$32,248,543	$281,677,651
2023	$201,823,546	$26,380,823	$36,834,918	$265,039,287

Source: LUS Financial and Operating Statements

3.4 Debt Service Coverage

LUS currently has several outstanding bonds that were issued for the purposes of making improvements and expansions to the three utility systems. LUS has a minimum DSC ratio of 1.0 as required by the Bond Ordinances and has continued to adequately maintain its DSC over the last five years. LUS's outstanding bonds are the Series 2023 Bonds, Series 2021 Bonds, Series 2019 Bonds, and Series 2017 Bonds. The Series 2010 Bonds were fully redeemed on November 1, 2020 with the proceeds of the Series 2017 Bonds. The Series 2012 Bonds were fully redeemed in November 2022 with the proceeds of the Series 2021 Bonds. Table 3-3 presents the historical debt service coverage ratio for LUS.

Table 3-3: Historical Debt Service Coverage

Year	Operating Revenues	Operating Expenses	Net Available Revenues	Debt Service	Debt Service Coverage Ratio
2019	$233,374,132	$152,839,402	$80,534,731	$22,732,925	3.5
2020	$219,286,785	$143,498,541	$75,788,244	$25,374,000	3.0
2021	$233,524,527	$162,712,354	$70,812,174	$25,095,600	2.8
2022	$281,677,651	$203,610,408	$78,067,243	$23,741,091	3.3
2023	$265,039,287	$174,447,206	$90,592,081	$23,650,100	3.8

Source: LUS Financial and Operating Statements

3.5 Rate Adjustments

The current rates for LUS are presented in the LCG Code of Ordinances, Article III – Rates and Charges, Division 1. The electric, water, and wastewater utilities each have their own tariffs for each customer class and are comprised of both fixed charges and variable charges. Rates are adjusted through rates studies that are conducted every few years with rate recommendations approved by the City Council. The fuel charge within the electric utility is adjusted monthly based on the cost of fuel and purchased power and the Utilities Director monitors and manages the fuel charge on a month-to-month basis to adequately recover eligible costs.

The utility completed a rate study for the electric, water, and wastewater utilities in FY 2022. Approved rate increases included 3 percent annual increases to electric in FY 2024 and FY 2025, 8 percent annual increases for water for FY 2023 to FY 2025, and 9.5 percent annual increases for wastewater from FY 2023 to FY 2025. Another rate study was completed in early FY 2024 that led to adopted rate increases for electric rates of 3.5 percent in FY 2026, FY 2027, and FY 2028. The Rate Study also proposed a 5.0 percent annual increase for water and wastewater for FY 2027 and FY 2028 however those have not yet been requested by LUS or adopted by the City Council. The historical approved total rate revenue adjustments by utility are presented in Table 3-4.

Table 3-4: LUS Historical Rate Adjustments

	2019	2020	2021	2022	2023
Electric Retail: Base Rate	0.0%	0.0%	0.0%	0.0%	0.0%
Water Retail	0.0%	0.0%	0.0%	0.0%	8.0%
Wastewater Retail	0.0%	0.0%	0.0%	0.0%	9.5%

3.6 Operating and Capital Budgets

LUS prepares and submits the proposed operating and capital budget to LCG annually for approval. The operating section of the budget includes projections of revenues and expenses for the upcoming FY. The operating projections for the upcoming FY are finalized subsequent to the completion of this Report.

The CIP is included within the 2024 Budget and is presented in Table 3-5 as provided by LUS to Burns & McDonnell. Forecasted CIP is anticipated to be funded through both retained earnings and the issuance of new bonds issued in FY 2023, FY 2025, and FY 2027. Additional details on the nature of the projects within the CIP are provided later within this Report for each utility. LUS has made adjustments to its 2024 five-year CIP proposed in July of 2023. The adjusted five-year CIP totals $152,250,000. The adjusted CIP delays approximately $30 million in wastewater treatment and collection projects from 2026 to 2029. The CIP presented does not include the cost of the Bonin 4 generating project.

Table 3-5: LUS 2024 Budget Projected Capital Improvement Plan

Electric	2024	2025	2026	2027	2028	Total
Acquisitions	$150,000	$200,000	$0	$0	$0	$350,000
Production	$8,205,000	$1,455,000	$655,000	$555,000	$555,000	$11,425,000
Distribution	$1,195,000	$2,460,000	$1,010,000	$985,000	$985,000	$6,635,000
Substation	$8,375,000	$3,855,000	$2,425,000	$4,275,000	$1,275,000	$20,205,000
Transmission	$1,710,000	$2,710,000	$4,510,000	$10,000	$10,000	$8,950,000
General Plant	$6,685,000	$3,235,000	$835,000	$260,000	$260,000	$11,275,000
Total Electric	$26,320,000	$13,915,000	$9,435,000	$6,085,000	$3,085,000	$58,840,000
Water						
Production	$830,000	$5,630,000	$4,880,000	$4,230,000	$1,730,000	$17,300,000
Distribution	$2,020,000	$7,670,000	$1,120,000	$1,720,000	$570,000	$13,100,000
Total Water	$2,850,000	$13,300,000	$6,000,000	$5,950,000	$2,300,000	$30,400,000
Wastewater						
Treatment	$3,085,000	$3,660,000	$3,760,000	$3,660,000	$6,860,000	$21,025,000
Collection	$10,885,000	$10,290,000	$10,140,000	$5,740,000	$4,930,000	$41,985,000
Total Wastewater	$13,970,000	$13,950,000	$13,900,000	$9,400,000	$11,790,000	$63,010,000
Total Capital Program	$43,140,000	$41,165,000	$29,335,000	$21,435,000	$17,175,000	$152,250,000

Source: LUS

(1) The 2024 5-year CIP has been adjusted in 2026 to delay approximately $30 million in wastewater projects.
(2) Electric Utility Production budgets include Bonin Generation Interconnection Study costs of $5.5 million in year 2024.
(3) Electric Utility Production budgets do not include the balance of the $362 million Bonin 4 power plant project.
(4) Amounts shown are in 2023 dollars.

3.7 LUS System Budget and Actual Performance

As part of this Report, Burns & McDonnell compared the LUS FY 2023 budgets to the FY 2023 actual results. This section presents the results of the LUS budget and actual accounts for FY 2023. The categories presented are similar to those in the FY 2023 Budget and may be slightly different than others found within the Report. LUS performed slightly better than expected during FY 2023 as demonstrated in Table 3-6.

Table 3-6: LUS Comparison of FY 2023 Budget and Actual Results

	2023 Actual (millions)	2023 Adopted Budget (millions)	Difference (millions)	Difference (%)
Operating Revenues				
Electric Retail Sales	$104	$106	($2)	-1.8%
Electric Retail Fuel Adj.	$91	$93	($2)	-2.3%
Electric Wholesale Sales	$0	$0	($0)	-8.8%
Water Sales	$25	$24	$0	0.9%
Wastewater Sales	$34	$34	$0	0.6%
Interest Income	$7	$0	$6	2932.7%
Miscellaneous Other	$4	$7	($3)	-40.1%
Total Operating Revenue	$265	$265	($0)	0.0%
Operating Expenses				
Purchased Power LPPA	$54	$85	($31)	-36.4%
Purchased Power Other	$4	$4	$0	3.0%
Purchased Power MISO	$73	$105	($31)	-29.9%
Purchased Power MISO Sales	($36)	($96)	$60	-62.5%
Production Fuel	$5	$14	($8)	-61.3%
Other O&M	$74	$84	($10)	-11.6%
ILOT	$25	$25	$1	3.4%
Total Operating Expenses	$200	$219	($19)	-8.8%
Other Income (Expenses)				
Normal Capital & Spec Equip	($17)	($13)	($4)	32.8%
Principal from Internal Loans	$2	$2	($0)	-3.8%
Interest from Internal Loans	$1	$1	$0	7.8%
Interest on Long Term Debt	($7)	($7)	$0	0.0%
Principal on Long Term Debt	($17)	($17)	$0	0.0%
Total Other	($38)	($34)	($4)	12.2%
Cash Available for Capital	$27	$12	$15	123.0%

Source: LUS Financial and Operating Statements

The electric utility experienced electric sales volumes and revenues that were in line with expectations; however, wholesale power and energy costs and production fuel costs were lower than expected and the overall non-power costs were lower than budgeted. The water and wastewater utilities' revenues and expenses were both lower than budgeted. The actual normal capital and special equipment spending was lower than the adopted budget which helped to provide more cash funding capital.

3.8 LUS Shared Services

Shared services for LUS are provided by the Customer Service & Support Service divisions. These divisions provide financial planning, rates, meter services, customer service, administration, and business support services for all three of LUS's utilities. The cost of these services is assigned and shared across the Electric, Water, and Wastewater Systems in the establishment of rates and charges. The customer service staff has experienced turnover that is typical within the industry and LUS worked with Civil

Service to implement an apprenticeship program to increase employee retention in FY 2022 and FY 2023. The Support Services division is a smaller group and has experienced lower turnover since implementation of the apprenticeship program.

3.9 Payment In Lieu of Tax

LUS makes an annual ILOT payment to the City. ILOT payments by municipally owned utilities are commonly used by local governments across the country to collect taxes and/or franchise fees that would be collected if an investor-owned utility were operating the utility franchises within the city. The LUS ILOT calculation provides for an ILOT payment of up to 12 percent of the Receipts Fund. The non-fuel revenues are the gross receipts less fuel costs and other miscellaneous items. To be eligible to make the ILOT payment, LUS must first pass an ILOT Test. The purpose of the test is to ensure that LUS has sufficient cash to meet capital obligations. If cash available after debt service, less 7.5 percent of the non-fuel revenues, is greater than 12 percent of the Receipts Fund, LUS passes the test and makes the ILOT payment to the City. Should LUS fail the ILOT Test, LUS pays an amount equal to the amount of cash available after debt service, less 7.5 percent of the non-fuel revenues. The American Public Power Association ("APPA") benchmarks ILOT as a percentage of revenue across the country as well as the West South Central Region, as defined by APPA, in which LUS is located. The median ILOT for this region is 8.2 percent while LUS has paid an average ILOT rate of 10.1 percent over the last 5 years as presented in Table 3-7.

Table 3-7: LUS Historical ILOT Payments

	2019	2020	2021	2022	2023
ILOT Paid (1)	$25,051,002	$24,679,711	$24,056,012	$24,185,667	$25,432,565
Total Operating Revenues	$233,374,132	$219,286,785	$233,524,527	$281,677,651	$265,039,287
ILOT as a percent of Revenues	10.7%	11.3%	10.3%	8.6%	9.6%

Source: LUS Financial and Operating Statements
(1) Represents ILOT paid for the Utilities System including electric, water, and wastewater systems.

3.10 Accounting and Financial Statements

LUS accounting responsibilities are managed and performed by LCG, including the selection of accounting software and related financial reporting. LCG prepares monthly Financial and Operating Statements for LUS which are also provided to the Engineer of Record monthly. These statements include a balance sheet, income statement, revenues and expenses, and other detailed operating statistics. The final audited financial statements contained in the Annual Comprehensive Financial Report ("ACFR") Statements are typically not available until April of the following fiscal year which is when this Consulting Engineer's Report is also completed. The detailed data contained within this Report is based upon the monthly Financial and Operating Statements provided to the Engineer of Record and may vary from the tables in the ACFR. Based on information contained in previous ACFRs and CERs the differences are generally not material.

3.10.1 Balance Sheet

The historical balance sheet for LUS is presented in Table 3-8. LUS assets have continued to grow as the utility systems each continue to grow to serve new customers. Bond funds increased considerably in 2019 as result of the Series 2019 Bonds and have begun to reduce as projects are completed. Retained earnings have grown steadily over the last few years while the debt to equity ratio has improved over the same time period.

Table 3-8: LUS Historical Balance Sheet

Total Assets	2019	2020	2021	2022	2023
Utility Plant	$ 561,320,749	$ 561,005,523	$ 572,808,275	$ 602,789,299	$ 624,298,135
Bond and Special Funds	213,449,976	216,710,984	193,456,237	160,416,624	163,234,139
Current Assets	10,183,720	9,110,701	10,212,476	12,058,722	10,390,700
Accounts Receivable	28,657,295	28,520,766	31,448,617	36,374,216	30,430,903
Reserve for Uncollectible Accounts	(941,530)	(799,310)	(1,069,077)	(1,784,508)	(1,799,973)
Notes Receivable	25,686,227	24,706,574	23,098,960	22,097,147	20,183,735
Inventories	9,444,953	10,671,253	11,440,176	13,894,280	15,757,400
Deferred Debits	23,962,998	23,542,330	26,685,847	25,180,077	25,636,677
Total Assets	$ 871,764,388	$ 873,468,821	$ 868,081,511	$ 871,025,857	$ 888,131,715
Total Liabilities & Equity					
Long Term Debt	$ 229,805,000	$ 215,615,000	$ 201,055,000	$ 185,430,000	$ 168,485,000
Current Liabilities	27,266,441	33,950,669	31,236,972	33,580,410	29,883,320
Long Term Liabilities	73,987,500	66,914,126	65,145,626	58,531,149	58,467,547
Retained Earnings	540,705,447	556,989,025	570,643,914	593,484,298	631,295,849
Total Liabilities & Fund Equity	$ 871,764,388	$ 873,468,821	$ 868,081,511	$ 871,025,857	$ 888,131,715

Source: LUS Financial and Operating Statements

3.10.2 Fund Balances

Article V of the LUS General Bond Ordinance dictates the funds and accounts of LUS and defines the 'Flow of Funds.' Article V creates several funds which are presented in Table 3-9. The flow of funds proceeds in the following order: Receipts Fund, Operating Fund, Sinking Fund, Reserve Fund, and Capital Additions Fund. Funds may be created as new bonds are issued. Table 3-9 summarizes the beginning balance, receipts, disbursements, and ending balances of the required funds cash balances. First, 7.5 percent of non-fuel revenues are transferred to capital costs of LUS. Then 12 percent of total deposits in the Receipts Fund are transferred to the General Fund of the City. Then funds are used to pay amounts due on any subordinated indebtedness with remaining funds used for other purposes under the LUS General Bond Ordinance.

Table 3-9: LUS Fund Balances as of October 31, 2023 ($1,000)

	Receipts Fund	Operating Fund	Bond & Interest Fund	Capital Additions	Bond Reserve Fund	2019 Bond Construction Fund	Total
Beginning Balance	$ 4,076	$ 8,022	$ -	$ 109,561	$ 14,700	$ 27,100	$ 163,459
Receipts	290,145	234,833	24,397	75,560	201	758	625,894
Disbursements	291,765	234,854	24,397	56,691	201	19,225	627,133
Ending Balance	$ 2,456	$ 8,001	$ -	$ 128,430	$ 14,700	$ 8,633	$ 162,220

Source: LUS Financial and Operating Statements

3.10.3 Income Statement

The LUS Income statement is presented in Table 3-10. Over the last five years LUS net operating revenues after depreciation have fluctuated between $45.2 million and $57.5 million. System growth and several rates increases that were implemented in FY 2023 have helped to maintain strong financial conditions. In FY 2020, LUS experienced a reduction in overall revenues which was largely driven by lower electric sales and electric revenues. The reduction was offset by a corresponding reduction in operating expenses which helped to maintain net operating revenues during FY 2020. Both revenues and expenses rebounded in FY 2021 as LUS came out of the Covid 19 Pandemic and returned to normal revenue and expense levels. However, overall net operating revenues were lower and when combined with other income and expenses LUS realized an overall decline in net income compared to FY 2020. FY 2022 saw a large increase in both operating revenue and expenses driven largely from increases in wholesale fuel and power costs. In FY 2023, LUS realized another large increase to the net operating revenues due to water and sewer rate increases and higher than normal demand. Interest income also increased 217 percent in FY 2023 due to higher interest rates. Other expenses also saw a noticeable decrease from a one-time expense credit.

Table 3-10: Historical Income Statement

	2019	2020	2021	2022	2023
Operating Revenues	$ 228,678,339	$ 216,381,978	$ 232,504,512	$ 279,622,064	$ 258,529,479
Operating Expenses	152,839,402	143,498,541	162,712,354	203,610,408	174,447,206
Net Operating Revenues	$ 75,838,938	$ 72,883,437	$ 69,792,158	$ 76,011,656	$ 84,082,273
Depreciation	25,130,355	25,189,698	24,589,046	25,244,789	26,609,996
Net Operating Revenues after Depreciation	$ 50,708,583	$ 47,693,738	$ 45,203,113	$ 50,766,867	$ 57,472,277
Other Income					
Interest Income	$ 4,695,793	$ 2,904,807	$ 1,020,016	$ 2,055,587	$ 6,509,808
Unrealized Gain/Loss on Invs	399,671	(139,572)	(128,924)	(1,471,006)	758,472
Amortization of Debt Premium	3,639,998	3,769,742	3,555,219	2,018,191	1,724,995
Water Tapping Fees	56,760	61,540	71,460	63,520	88,680
Communications Lease Income	0	11,379	0	7,906	3,953
Contributions in Aid of Construction	0	140,856	0	150,700	30,188
Misc. Non Operating Revenue	3,141,166	3,633,306	2,412,390	4,330,861	5,728,197
Total Other Income	$ 11,933,388	$ 10,382,059	$ 6,930,161	$ 7,155,760	$ 14,844,292
Other Expenses					
Loss on Disposition of Property	309,767	290,397	507,437	255,880	699,620
Interest Expense	10,362,925	11,184,000	10,535,600	7,416,091	6,705,100
Amortizations	2,187,756	1,986,896	1,801,118	827,582	627,127
Interest on Customer Deposits	5,331	1,834	1,897	1,927	978
Tax Collections/Non Operating	0	0	0	0	0
Misc Non Operating Expense	3,369,807	3,649,380	1,576,322	2,408,295	690,830
Total Other Expenses	$ 16,235,585	$ 17,112,507	$ 14,422,373	$ 10,909,776	$ 8,723,655
Net Income Before in Lieu of Tax	46,406,385	40,963,291	37,710,900	47,012,850	63,592,914
ILOT	25,051,002	24,679,711	24,056,012	24,185,667	25,432,565
Net Income	$ 21,355,383	$ 16,283,580	$ 13,654,888	$ 22,827,183	$ 38,160,349

Source: LUS Financial and Operating Statements

3.10.4 Cash Flow Statement

The LUS historical cash flows are presented in Table 3-11. LUS, like many other municipals, is primarily focused on net cash flows and cash balances and traditionally set rates based on meeting cash targets including, but not limited to, debt service coverage. Since FY 2021, LUS has seen a steady increase in its change in cash due to operations and ILOT. The lower change in cash due to operations in FY 2020 is attributed to the same factors discussed in the net income statement section of this Report.

Table 3-11: LUS Historical Cash Flows

	2019	2020	2021	2022	2023	Five-Year Total
Operating Revenues	$ 228,678,339	$ 216,381,978	$ 232,504,512	$ 279,622,064	$ 258,529,479	$ 1,215,716,372
Operating Expenses	152,839,402	143,498,541	162,712,354	203,610,408	174,447,206	837,107,911
Net Operating Revenues	$ 75,838,938	$ 72,883,437	$ 69,792,158	$ 76,011,656	$ 84,082,273	$ 378,608,461
Debt Service	22,732,925	25,374,000	25,095,600	23,741,091	23,650,100	120,593,716
Balance After Debt Service	$ 53,106,013	$ 47,509,437	$ 44,696,558	$ 52,270,565	$ 60,432,173	$ 258,014,745
Less Normal Capital & Special Equipment	6,979,931	11,144,716	11,994,962	12,584,942	16,624,504	59,329,055
Less ILOT	25,051,002	24,679,711	24,056,012	24,185,667	25,432,565	123,404,957
Change in Cash due to Operations and ILOT	$ 21,075,080	$ 11,685,010	$ 8,645,584	$ 15,499,955	$ 18,375,104	$ 75,280,733

Source: LUS Financial and Operating Statements

4.0 ELECTRIC UTILITY SYSTEM

4.1 Electric Utility Summary

The City owns and operates an Electric System providing reliable power to approximately 71,500 retail customers. LUS operates power generation, transmission, substation, distribution, and customer facilities within and outside its service territory. Table 4-1 presents the historical Electric System retail sales, wholesale sales, and wholesale purchases over the last five years.

Table 4-1: Electric System Historical Retail and Wholesale Sales

Year	Retail Sales (MWh)	Wholesale Sales (MWh)	MISO Market Sales (MWh)	MISO Market Purchases (MWh)
2019	2,004,310	0	1,132,482	2,036,411
2020	1,917,040	0	736,830	1,987,674
2021	1,959,364	0	1,088,904	2,009,920
2022	1,981,782	0	1,136,926	2,032,346
2023	2,047,185	0	885,546	2,113,571

Source: LUS Financial and Operating Statements

LUS has been a full market participant as a Local Balancing Authority and Transmission Owner within the Midcontinent Independent System Operator, Inc. ("MISO") since 2013. Participation in the MISO market requires a buy-all/sell-all type of transaction for energy. LUS purchases all its energy requirements to serve its load from the MISO market. Correspondingly, MISO dispatches the LUS generation units, and all the generation is sold into the MISO market. The MISO Market Purchases represent purchases from the MISO market to serve LUS retail load. As presented in Table 4-2, retail sales by class as of October 31, 2023, indicate that residential and commercial customers represent approximately 90 percent of Electric System sales. The LUS commercial customer base is diverse, with no single customer representing more than 2 percent of LUS electric retail revenues.

Table 4-2: Electric System Customer Class Statistics as of October 31, 2023

	Number of Customers	Percent of Total	Sales (kWh)	Percent of Total
Residential	58,091	81.2%	878,154,533	42.9%
Residential - Outside the City	1,118	1.6%	19,561,813	1.0%
Commercial without Demand-Small	8,438	11.8%	196,871,027	9.6%
Commercial Small and Large - Outside the City	191	0.3%	17,936,405	0.9%
Commercial with Demand - Large	1,229	1.7%	739,604,592	36.1%
Private Security Lighting	1,755	2.5%	5,104,408	0.2%
Street Lighting	2	0.0%	12,426,194	0.6%
Schools and Churches	394	0.6%	61,603,308	3.0%
Municipal-General Fund	6	0.0%	590,499	0.0%
University of Louisiana - Lafayette	112	0.2%	75,883,539	3.7%
Interdepartmental	185	0.3%	39,448,525	1.9%
Total	71,521	100.0%	2,047,184,843	100.0%

Source: LUS Financial and Operating Statements

4.2 Power Supply Summary

LUS provides energy and capacity to its customers through owned resources and power supply contracts. The total peak demand for LUS increased from 456 MW in 2022 to 502 MW in 2023 or an increase of nearly 10 percent. The increase was driven by several days of extended extreme temperatures above 110 F in August 2023, however, it is not predicted to repeat in 2024. The peak load is predicted to return to 2022 levels in 2024 and gradually increase to 500 MW by 2036 based on load forecasts completed in early 2022. LUS is forecasted to experience long-term load growth of around 0.6 percent, which is consistent with other utilities' load forecasts in the region.

LUS owns and operates two power generation facilities in Lafayette: T.J. Labbe and Hargis-Hebert. Both facilities have two natural gas-fired combustion turbines to provide capacity and energy. These four natural gas-fired combustion turbines are interconnected to the transmission system within the City of Lafayette. In addition to the power plants which LUS owns, LUS also has several power purchase agreements in place to provide capacity and energy to meet its load. Through the LPPA, Lafayette owns 50 percent of Rodemacher Unit 2, which is a coal-fired unit with a capacity of approximately 500 MW located near Boyce, Louisiana. Rodemacher Unit 2 is operated by Cleco Corporate Holdings, LLC as part of the Brame Energy Center. Table 4-3 presents the approximate installed capacity ("ICAP") for the power supply resources owned by LUS.

Table 4-3: LUS Power Supply Resources (Net Capacity)

LUS Power Plants		
Unit	Fuel	Installed Capacity (ICAP, MW)
Hargis-Hebert 1	Natural Gas	47
Hargis-Hebert 2	Natural Gas	47
TJ Labbe 1	Natural Gas	48
TJ Labbe 2	Natural Gas	47
LUS Power Purchase Agreements		
Unit	Fuel	Installed Capacity (ICAP, MW)
Lafayette Public Power Authority (LPPA) Rodemacher Unit 2	Coal	246
Southwest Power Administration	Hydro	18
TEA (1)	Capacity only	35, 41

Note 1: LUS purchases MISO capacity seasonally as of 2023. The capacities listed are 41 MW for Summer 2023 and 35 MW for Fall 2023. LUS has recently purchased 25 MW for Summer 2024 and 50 MW for Fall 2024.

As illustrated by the list above, LUS has a diverse power supply portfolio consisting of coal, natural gas, and hydroelectric resources. The Southwest Power Administration contract consists of hydroelectric resources and is expected to operate until 2033.

Within the IRP conducted in 2019-2020, the long-term operation of Rodemacher Unit 2 was specifically evaluated due to the ongoing environmental regulations which impact coal-fired units, as well as the associated economics. Within the IRP evaluation, long-term operation of Rodemacher Unit 2 utilizing coal as a fuel was higher cost compared to other power supply alternatives. As such, LUS and the other joint owners of the plant have committed to the retirement of Rodemacher Unit 2 from operation at the end of 2027. LUS plans to construct a new gas-fired generation capacity, named Bonin 4, which will replace the Rodemacher Unit 2 generation capacity in 2028. At the time of this report, the joint owners of Rodemacher Unit 2 are developing a plant decommissioning plan to begin in 2028.

In addition to the plants above, LUS has two retired power plant facilities consisting of the Louis “Doc” Bonin Generation Station (“Bonin”) (the site of the LUS operations center) and the Curtis Rodemacher Generation Station. Both plants were retired as they became economically obsolete. The Bonin facility was retired in 2017 and has gone through various decommissioning and demolition efforts. The Bonin facility had four fuel oil tanks located on-site that have been demolished, removed, and remediated. LUS has removed the cooling towers, specifically the cooling tower for Unit 3 to provide additional space for electrical switchyard/substation expansions. The remediation and demolition have been completed for some of the cooling tower equipment. The only structures that remain are the concrete basins which are at, or below, grade in addition to the underground supply and return piping and the associated pumps, motors, and motor control centers that are to be removed in future phases of the demolition project. The balance of the existing facilities will be demolished in 2024 to make space for the future Bonin 4 project.

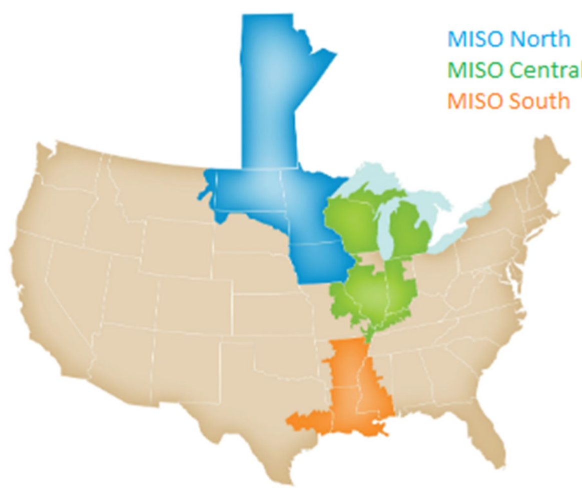
LUS recently received approvals to proceed forward with the engineering design, procurement, and construction of a new gas-fired simple cycle generation facility at the existing Bonin Generating Station site named Bonin 4. This City approved the project on March 5, 2024. Bonin 4 will include a single natural gas-fired combustion turbine generator with a total capacity ranging from 220 to 240 MW. The plant will be capable of being fueled with natural gas and will inject power into LUS’s local transmission network. The plant will be constructed on the existing Doc Bonin Generating Station site once the existing older units are demolished in 2024. The site will include a new administrative building, warehouse, and maintenance shop. The plant is expected to begin operation in 2028. LUS has conservatively budgeted $362 million for the project and has requested authorization to borrow up to $400 million to fund the project, debt service reserve, and other related bond issuance costs.

The Curtis Rodemacher facility is a retired natural gas-fired steam plant. The plant was retired in 1993 from power generation. The facility was retired-in-place and LUS continues to monitor the facility and address issues as they arise associated with lead-based paint, asbestos, and other maintenance requirements. The Rodemacher facility is adjacent to the Pinhook substation.

4.2.1 MISO Wholesale Market

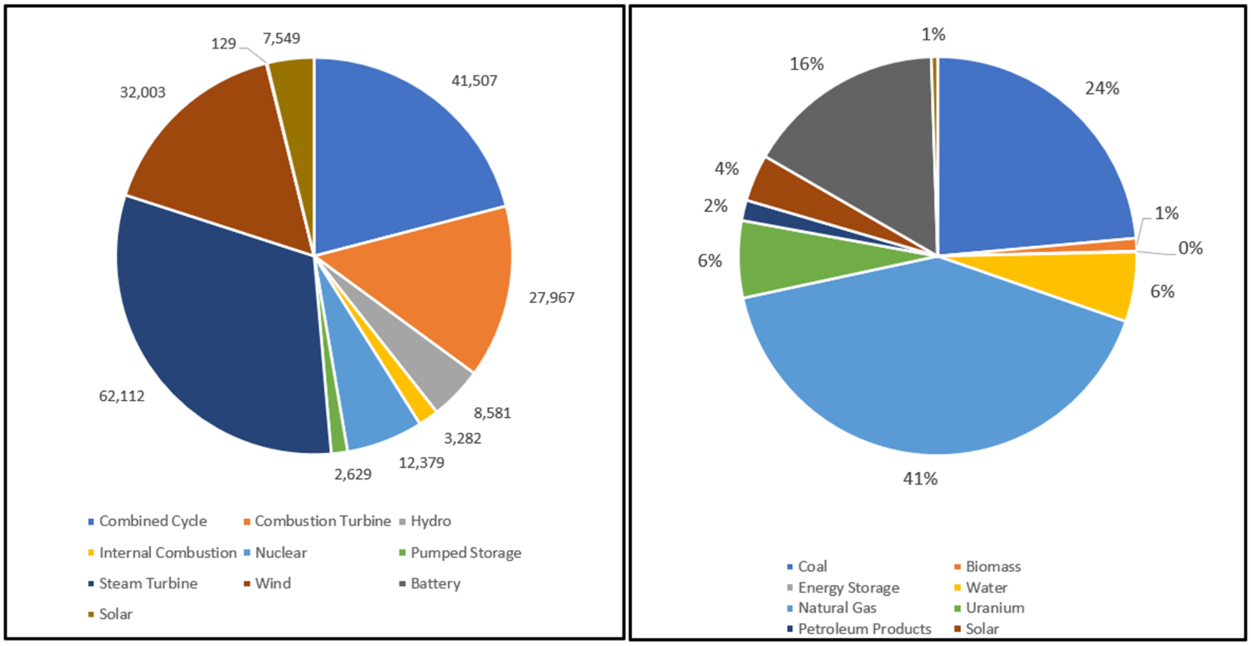
The power grid, consisting of power generation and transmission lines, is operated by independent system operators across many areas of the country. Within the central part of the country, MISO is the system operator. MISO is charged with the reliable operation of the grid. MISO initiated its integrated marketplace on April 1, 2005. On December 18, 2013, LUS officially joined MISO, along with several other utilities which formed the MISO South region and was integrated into MISO's transmission system. MISO is separated into three areas: North, Central, and South. LUS operates in the MISO South region. The MISO market is made up of numerous utilities operating in 15 states and the Canadian province of Manitoba as illustrated in Figure 4-1.

Figure 4-1: MISO Market Area



MISO has a wide range of capacity and energy resources including fossil fuel, renewable, and nuclear generation. The capacity and energy mix of resources within MISO for 2023 is presented in Figure 4-2.

Figure 4-2: MISO 2023 Summer Capacity (MW) and Generation (%) by Fuel Type



MISO South is more heavily based on natural gas resources compared to the other two MISO regions, which rely more heavily on coal-fired resources. MISO North has the most extensive wind generation within the MISO footprint.

Utilities typically acquire all their energy from the market and sell energy from their resources into the market when it is accepted for dispatch, rather than self-scheduling resources. LUS has retained The Energy Authority ("TEA") as its power and fuel marketer. TEA is registered as the market participant for LUS. TEA has the responsibility to assist LUS in developing a strategy for procuring and selling energy within the MISO market.

To provide sufficient capacity near load centers, MISO is divided into ten Local Resource Zones ("LRZ"), as presented in Figure 4-3 below. A utility must obtain enough capacity within its LRZ to meet MISO's requirements. LUS is in LRZ 9.

As of 2023, MISO implemented a seasonal capacity market where each load serving entity, including LUS, receives a seasonal capacity accreditation for its generating units. The seasonal accreditation of each unit changes from season to season and LUS purchases capacity from other market participants to fulfill its capacity obligations.

Figure 4-3: MISO Load Resource Zones[1]

Wholesale energy prices in MISO have continued to increase since their lows in 2020. The MISO market load costs experienced abnormally high energy prices in February 2021 because of Winter Storm Yuri and sustained high summer gas prices. In 2022, wholesale natural gas and MISO load costs continued to remain high due to international conflicts in Europe which resulted in a tightening of natural gas supply globally which increased energy prices across the United States. Wholesale natural gas prices decreased in 2023 but remained high compared to recent historical averages. As discussed above, LUS dispatches its power generating facility into the MISO market. Table 4-4 presents the historical electric generation for each plant. In 2022, LUS's gas-fired power plants realized a large increase in their annual production due to increased market energy prices across MISO. This trend continued into FY 2023.

Table 4-4: Electric Generation by Plant (MWh)

	2019	2020	2021	2022	2023
T.J. Labbe	13,755	17,976	21,691	81,920	53,788
Hargis Hebert	22,934	21,807	31,081	74,840	45,101
Rodemacher Unit 2	1,045,878	656,054	994,006	935,616	739,812
Total Generation	1,082,567	695,837	1,046,778	1,092,376	838,701

[1] MISO, *2020/2021 Planning Resource Auction (PRA) Results*, April 2020, https://cdn.misoenergy.org/2020-2021%20PRA%20Results442333.pdf

4.2.2 T.J. Labbe Plant

4.2.2.1 Plant Description

The T.J. Labbé Plant began commercial operation in 2005 and consists of two General Electric ("GE") simple cycle LM6000 PC aeroderivative combustion turbines. The turbines each have a nominal net output of 48 MW each. The turbines utilize GE's Spray Intercooling ("SPRINT") system. The SPRINT system works by spraying atomized water directly into the air stream in the compressor stages to cool the air and increase the mass flow through the turbine, thereby increasing the electrical output of the generator. The combustion turbines also utilize water injection to control nitrous oxides ("NO_x") emissions.

The combustion turbines use natural gas as the fuel source, which is supplied by the TransCanada interconnect pipeline. T.J. Labbé has three 50 percent gas compressors on site, but they are not used as gas supply pressure to the site is sufficient to run the combustion turbines without compression.

To improve combustion turbine performance during warmer weather conditions, each unit is also equipped with an inlet chiller system. A Turbine Air Systems ("TAS") chiller system provides chilled water to coils in the inlet filter house to cool inlet air entering the turbine, thereby increasing the mass flow through the turbine, and increasing power output. The chiller can cool the inlet air down to 48°F for optimum performance up to an ambient temperature of 90°F.

The exhaust stacks are equipped with a continuous emission monitoring system ("CEMS") to ensure that the turbines comply with emissions limits.

The facility is equipped with a 600-kW emergency generator that provides black start capability.

4.2.2.2 Performance and Statistics

The LM6000 is a proven machine with years of operating experience. The first LM6000 turbine was installed in 1992 and the 1,200 units installed world-wide have logged over 39 million operating hours. The LM6000 PC can start and reach based load within 10 minutes. The turbines also have the capability of ramping at 50 MW/min. The flexible operating profile makes these combustion turbines ideal units to service peak demand loads. Table 4-5 and Table 4-6 present the historical operating statistics for the last five years for T.J. Labbé.

Table 4-5: Unit 1 Historical Operating Statistics

	2019	2020	2021	2022	2023	Five-Year Average
Unit 1						
Gross Generation (MWh)	8,848	9,377	12,159	43,706	30,948	21,008
Net Generation (MWh)	8,128	8,779	11,574	42,925	30,291	20,339
Unit Capacity Factor (%)	2.2%	2.4%	4.2%	14.8%	10.5%	6.8%
Unit Service Factor (%)	4.5%	4.7%	5.1%	14.5%	9.3%	7.6%
Unit Starts	73	63	69	144	136	97
Availability Factor (%)	92.6%	93.9%	91.4%	90.3%	88.0%	91.2%
Forced Outage Rate (%)	0.0%	0.2%	0.0%	2.0%	0.4%	0.5%
Avg. Net Online Heat Rate (Btu/kWh)	13,425	13,563	12,979	11,250	11,684	12,580

Note 1: Average Heat Rate is for the entire T.J. Labbé plant and not specific to Unit 1.

Table 4-6: Unit 2 Historical Operating Statistics

	2019	2020	2021	2022	2023	Five-Year Average
Unit 2						
Gross Generation (MWh)	8,586	9,634	12,242	43,748	29,200	20,682
Net Generation (MWh)	7,079	8,082	10,806	40,232	26,919	18,624
Unit Capacity Factor (%)	2.2%	2.3%	4.6%	15.7%	10.6%	7.1%
Unit Service Factor (%)	4.3%	4.8%	5.5%	10.1%	8.7%	6.7%
Unit Starts	72	70	70	110	128	90
Availability Factor (%)	93.2%	97.6%	95.4%	91.9%	90.3%	93.7%
Forced Outage Rate (%)	0.0%	0.0%	1.0%	0.2%	6.6%	1.6%
Avg. Net Online Heat Rate (Btu/kWh)	13,425	13,563	12,979	11,250	11,684	12,580

Note 1: Average Heat Rate is for the entire T.J. Labbé plant and not specific to Unit 2.

The historical performance data from T.J. Labbé are in line with typical industry benchmarks for similar type units. Overall, the reliability and availability of the units is considered very good. During FY 2022 the plant operated much more than previous years primarily due to high energy market costs in MISO. This trend continued into FY 2023 but to a lesser extent. T.J. Labbe performed very well and continued to be financially beneficial and reliable for LUS's power costs in FY 2023.

4.2.2.3 Recent and Planned Upgrades and Maintenance

LUS has chosen to perform the major maintenance inspections more frequently than the original recommendation by GE due to feedback from other LM6000 owners in the industry. Plant personnel indicated that the combustion turbines undergo a borescope inspection twice a year, once in Spring and once in Fall. It is also documented that units will receive a borescope inspection if there is a trip where the cause is not readily known. Hot section exchanges ("HSE") are scheduled every 15,000 hours instead of the original recommendation of 25,000 hours. The major overhauls are scheduled every 30,000 hours instead of the original recommendation of 50,000 hours. Variable stator vane ("VSV") bushings are changed every 10,000 hours instead of the original recommendation of 12,500 hours. High pressure combustion ("HPC") stage 1 blades are changed every 15,000 hours and the HPC stage 3-5 blades are changed every 1,000 starts. Although the more frequent major maintenance activities result in a higher O&M cost for the facilities, the low number of operating hours per year for each of the units means that each unit has only undergone one HSE to date and no major overhauls have been completed.

LUS has also continued to perform regular maintenance on the balance of plant equipment at T.J. Labbé. This includes eddy current testing for chiller condenser tubes, stack inspections, chiller coil installation, and painting the VBV duct.

Additional recent and planned 2024 projects at the plant include expansion joint replacement and ILI inspection (pipeline smart pig).

4.2.2.3.1 T.J. Labbé Unit 1

In 2023, the Unit 1 combustion turbine underwent a borescope inspection in the Spring and in the Fall. The Spring and Fall borescope inspections were conducted by GE. At the time of the Spring inspection, Unit 1 had experienced 1,270 fired starts and 23,032 fired hours. At the time of the Fall inspection, Unit 1 had experienced 1,374 fired starts and 23,575 fired hours. During each borescope inspection, the inlet/compressor, combustion, turbine, and exhaust sections were evaluated. All sections were considered serviceable, and no major concerns were noted.

The Unit 1 combustion turbine received a hot section exchange inspection in 2013. At the time of the inspection, the unit had experienced 17,520 fired hours and 548 fired starts. During the inspection, the HPT rotor assembly, and the stage 1 and 2 nozzle assemblies were replaced. The combustor has no visual defects detected. The combustor for Unit 1 was previously replaced in 2011 when the unit was at 16,784 fired hours and 477 fired starts.

The unit has not yet received a major overhaul given its limited operating hours. The first major overhaul is planned for 30,000 hours.

4.2.2.3.2 T.J. Labbé Unit 2

In 2023, the Unit 2 combustion turbine underwent a borescope inspection in the Spring and in the Fall. The Spring borescope inspection was conducted by TransCanada Turbines and the Fall borescope inspection was conducted by TransCanada Turbines. At the time of the Spring inspection, Unit 2 had experienced 1,384 fired starts and 16,546 fired hours. At the time of the Fall inspection, Unit 2 had experienced 1,481 fired starts and 17,050 fired hours. During each borescope inspection, the inlet/compressor, combustion, turbine, and exhaust sections were evaluated. All sections were considered serviceable, but the T-48 E needs to be replaced due to potential tip liberation.

Unit 2 combustion turbine also received a hot section exchange inspection in 2015. At the time of the inspection, the unit had experienced 12,475 fired hours and 729 fired starts. During the inspection, the engine was shipped to Houston to receive a hot section replacement. The combustion chamber, the HPT rotor, and the stage 1 and 2 nozzle assemblies were also replaced. A new VBV expansion joint was installed.

The turbine was sent to a GE facility to undergo improvements to the air oil seals in Spring 2017. The unit has not yet received a major overhaul given its limited operating hours. The first major overhaul is planned for 30,000 hours.

4.2.2.4 Fuel Supply

Natural gas is delivered to T.J. Labbé at pressures in the range of 675 psig plus or minus 20 psig. As such, the three 50 percent natural gas compressors at Labbe are not needed and have been permanently bypassed and decommissioned in Spring 2017. The natural gas is delivered through a fuel gas strainer, gas flow meter, a primary and secondary shut off valve, a fuel gas manifold, and goes to the fuel nozzles.

Natural gas from the TransCanada pipeline is procured on behalf of LUS by The Energy Authority (TEA) who also bids the units in as MISO market participants. The quantity and price of gas is determined daily based on day-ahead nominations. T.J. Labbé does not have firm gas supply.

4.2.2.5 Water Supply

Water treatment at each site consists of chemical treatment, granular activated carbon (“GAC”) pre-filtration, cartridge filtration, reverse osmosis, and mixed bed demineralizer systems. The water treatment system is used to meet the facilities’ 143 gpm makeup water requirement for lost system water due to chiller cooling towers, water injection for NO_x control, and for the SPRINT system.

City water supply is delivered under pressure to the inlet of the pre-filtration skid. Prior to entering the filtration system, the feed water supply is dosed with sodium meta bi-sulfite to remove chlorine. The GAC filter removes organic matter and any residual chlorine from the feed water supply prior to its use in the reverse osmosis system. The reverse osmosis system removes most of the dissolved solids from the feed water by using a high-pressure pump to force water through a membrane that removes contaminants. Each reverse osmosis train consists of two passes. The second pass outlet is tied to a mixed bed demineralizer which removes the remaining dissolved solids and silica from the feed water. The demineralized (“demin”) water is stored in a 180,000-gallon storage tank at each site. Each site contracts with a third party to regenerate the mixed bed and carbon filters.

Additionally, T.J. Labbé has wastewater discharge restrictions, so there is a wastewater storage tank on site that manages the discharge.

4.2.2.6 Plant Transmission Delivery

Power at T.J. Labbé is generated by two 72 megavolt amperes (“MVA”), 13.8 kilovolts (“kV”) turbine generators. Each generator sends electricity to a generator step-up (“GSU”) transformer via cable bus systems. The GSUs at T.J. Labbé step the 13.8 kV power up to 230 kV. Each of the turbine generators also send electrical power to auxiliary transformers that drop the voltage down to 4.16 kV. The 4.16 kV from the auxiliary transformers is sent to the medium voltage (“MV”) switchgear where it is relayed to the station service transformers and the chiller system. The station service transformers further step down the voltage from 4.16 kV to 480 V for station auxiliaries such as fans, pumps, and motors.

4.2.2.7 Plant Staffing and Operations

The facility is staffed 24 hours per day, 7 days a week, but can also be started and monitored remotely at the Hargis-Hébert facility.

4.2.2.8 Environmental Permits and Compliance

The Labbé plant’s Title V and Acid rain permits expired on August 23, 2023. LUS submitted timely Title V and Acid Rain Permit Renewal Applications for Labbé in June of 2022, with additional information provided in November of 2022. LUS is waiting for the LDEQ to issue the new Title V permit and operating under the expired Title V permit and construction permits until the new Title V permit is issued. The Acid Rain permit requires quarterly reports on emissions of NO_x, sulfur dioxide (“SO_2”), and carbon dioxide (“CO_2”). NO_x from the turbines is measured by CEMS . The turbines are classified as “gas-fired” under Acid Rain since fuel oil combustion is less than 10 percent of the annual capacity. Currently, the units do not have the ability to operate using fuel oil. If the units begin operating on fuel oil over that 10% threshold of annual capacity, it will become classified as “oil-fired,” requiring additional monitoring for these units.

The Title V permit includes limits that make the facility a minor source for the Prevention of Significant Deterioration (“PSD”) program by limiting emissions of CO and NO_x. The facility is a minor source of HAPs. The two turbines can burn natural gas, and the one black start generator burns fuel oil. The permit allows the facility to operate as a peaking plant, meaning that while actual emissions are low, the permit allows for significant operation as needed as long as the ton per year limits are not exceeded. When emission rates were updated in the Title V renewal, the application sets CO emissions to 237.56 tpy for CO (down from 239.11 tpy in the previous permit) and NO_x emissions to 241.37 tpy (no change from previous permit). The emissions inventory for the site is due in April of the following year. The emissions inventory is submitted to the Emissions Reporting and Inventory Center (ERIC) Website, maintained by the LDEQ. The CY2022 inventory for Labbé was submitted in early March 2023. Actual emissions for 2023 were less than 23 tons NO_x. The Title V permit allows fuel oil operation even though the turbines are not capable of burning fuel oil without physical modification.

As presented in Table 4-8, Labbé holds sufficient allowances for its 2023 emissions under the Cross State Air Pollution Rule ("CSAPR") for the May to September ozone season, based on previous years' operation. A separate CSAPR permit is not required.

No excess emission events occurred in 2023 and no Notice of Violations ("NOVs") were issued. All required quarterly, semi-annual, and annual reports were submitted.

Table 4-7: T. J. Labbé Air Permits

Permit Description	Permit Number	Issue Date	Expiration Date	Renewal Application Deadline
Title V Operating Permit	1520-00128-V5[a]	TBD – Waiting on LDEQ for issuance	TBD – Waiting on LDEQ for issuance	TBD – Waiting on LDEQ for issuance
Acid Rain Permit	1520-00128-IV4[a]	TBD – Waiting on LDEQ for issuance	TBD – Waiting on LDEQ for issuance	TBD – Waiting on LDEQ for issuance

Source: LUS

a) These are the expected permit numbers for the renewed Title V and Title IV Permits.

Table 4-8: T. J. Labbé Emission Allowances

NO_x Allowances Held at the Start of 2023 (tons)	Initial Allocations into the CSAPER Expanded Group 2 (tons)	2023 Ozone Season NO_x Emissions (tons)	SO_2 Allowances Held at the Start of 2023 (tons)
46[a]	20[b]	17	1,250

Source: LUS

(a) These balances were transferred into Labbé's account for the Expanded Group 2 CSAPER account.

(b) 10 tons were put into Labbé's account for both 2023 and 2024.

When the 2015 Ozone NAAQS was promulgated, 26 states had to submit a State Implementation Plan (SIP) outlining how the state would meet the applicable requirements of the rule. Louisiana was one of these states and had until October 1, 2018, to submit the SIP for the new rule. Louisiana submitted a SIP on November 13, 2019, for the 2015 Ozone NAAQS. The EPA officially disapproved Louisiana's SIP (along with 18 other states) in early 2023. A Federal Court stayed the EPA's rejection of Louisiana's SIP. The Good Neighbor Plan (GNP) was published in the federal registrar on June 5, 2023, and became effective as of August 4, 2023. In the final version of the GNP, Louisiana and Kentucky were put into an expanded Group 2 trading program. The Group 2 trading program regulations for these two states were modified to maintain state emissions budgets, unit-level allowance allocation provisions, and banked allowance holdings in the new expanded Group 2 designation. The revision also made the allowances for Kentucky and Louisiana in the updated Group 2 trading program non-interchangeable with the allowances utilized by Group 2 power plants in other states. As shown in Table 4-8, the held allocations as well as the 2023 and 2024 NOx allocations were transferred into Labbé's new expanded Group 2 allocation account.

Historical ozone season NO_x emissions indicate that it may be necessary for LUS to purchase additional NO_x allocations. The GNP Rule implements a cap-and-trade program similar to previous interstate air pollution plans. Any shortfall in allocations will need to be purchased on the market, limiting available allocations between sites covered by the expanded group 2 program. For comparison, the past four years of emissions data as recorded by the EPA have varied from a low of 5.1 per generating unit to a high of 21.5 per generating unit.

4.2.3 Hargis-Hebert Plant

4.2.3.1 Plant Description

Hargis-Hébert began commercial operations in 2006 and is nearly identical to T.J. Labbé. Hargis-Hebert consists of two GE simple cycle LM6000 PC aeroderivative combustion turbines. The turbines each have a nominal net output of 48 MW each. The turbines utilize GE's SPRINT system for increased power output and water injection to control NO_x emissions.

The combustion turbines use natural gas as the fuel source, which is supplied by the Gulf South pipeline. Gas supply pressure to the site is sufficient to run the combustion turbines without compression.

To improve combustion turbine performance during warmer weather conditions, each unit is also equipped with an inlet chiller system. A TAS chiller system is capable of cooling the inlet air down to 48°F for optimum performance up to an ambient temperature of 90°F.

The exhaust stacks are equipped with CEMS to ensure that the turbines comply with emissions limits. The facility is equipped with a 600-kW emergency generator that provides black start capability.

4.2.3.2 Performance and Statistics

Table 4-9 and Table 4-10 present the historical operating statistics for the last five years for Hargis-Hebert.

Table 4-9: Unit 1 Historical Operating Statistics

	2019	2020	2021	2022	2023	Five-Year Average
Unit 1						
Gross Generation (MWh)	14,088	12,876	17,772	41,833	26,712	22,656
Net Generation (MWh)	13,494	12,301	17,039	40,992	26,627	22,091
Unit Capacity Factor (%)	3.7%	3.2%	5.8%	13.5%	8.4%	6.9%
Unit Service Factor (%)	6.5%	5.9%	6.3%	13.7%	8.7%	8.2%
Unit Starts	63	94	89	152	126	105
Availability Factor (%)	90.7%	94.0%	93.2%	92.0%	88.1%	91.6%
Forced Outage Rate (%)	0.3%	0.0%	0.0%	3.4%	1.1%	1.0%
Avg. Net Online Heat Rate (Btu/kWh)	11,956	13,438	12,312	11,094	11,266	12,013

Note 1: Average Heat Rate is for the entire Hargis-Hebert plant and not specific to Unit 1.

Table 4-10: Unit 2 Historical Operating Statistics

	2019	2020	2021	2022	2023	Five-Year Average
Unit 2						
Gross Generation (MWh)	12,571	9,008	15,619	39,231	24,448	20,175
Net Generation (MWh)	11,000	7,638	14,058	36,037	21,962	18,139
Unit Capacity Factor (%)	3.5%	2.36%	5.4%	13.4%	8.4%	6.6%
Unit Service Factor (%)	6.7%	4.6%	5.1%	12.5%	7.7%	7.3%
Unit Starts	88	55	91	141	123	100
Availability Factor (%)	87.6%	91.6%	93.5%	92.0%	88.1%	90.6%
Forced Outage Rate (%)	0.0%	0.0%	0.0%	12.6%	0.9%	2.7%
Avg. Net Online Heat Rate (Btu/kWh)	11,956	13,438	12,312	11,094	11,266	12,013

Note 1: Average Heat Rate is for the entire Hargis-Hebert plant and not specific to Unit 2.

The historical performance data from Hargis-Hebert are in line with anticipated values that Burns & McDonnell has observed in the industry. Overall, the reliability and availability of the units are good. During FY 2022 the plant operated much more than previous years primarily due to high market energy costs in MISO. This trend continued in FY 2023 but to a lesser extent. The plant performed very well during FY 2023 and proved to be financially beneficial and reliable for LUS's power costs.

4.2.3.3 Recent and Planned Upgrades and Maintenance

LUS has chosen to perform the major maintenance inspections more frequently than recommended by GE due to feedback from other LM6000 owners in the industry. Inspection schedules are the same as for T.J. Labbé. Normal spring and fall borescopes were completed in FY 2022.

LUS has also continued to perform regular maintenance on the balance of plant equipment at Hargis-Hebert. This includes chiller building rehabs, stack inspections, and replacement of all canister filters.

Additional recent and planned projects at the plant include upgrades and minor repairs. These projects include painting the chiller building floor, replacing the exhaust expansion joint, painting the filter house roof, replacing the instrument air compressor, and replacing the instrument air dryer.

4.2.3.3.1 Hargis-Hebert Unit 1

Unit 1 received borescope inspections in the spring and fall of FY 2023. In Spring of 2023, the Unit 1 combustion turbine underwent a borescope inspection conducted by TransCanada Turbines. At the time of the inspection, Unit 1 had experienced 1,548 fired starts and 20,235 fired hours. In Fall of 2023, the Unit 1 combustion turbine underwent a borescope inspection conducted by TransCanada Turbines. At the time of the inspection, Unit 1 had experienced 1,648 fired starts and 20,742 fired hours. During the borescope inspection, the inlet/compressor, combustion, turbine, and exhaust sections were evaluated. All sections were considered serviceable, and no major concerns were noted.

The Unit 1 combustion turbine also received a hot section exchange inspection in 2013. At the time of the inspection, the unit had experienced 14,917 fired hours and 870 fired starts. During the inspection, the hot section was replaced except for the combustion chamber.

The unit has not yet received a major overhaul given its limited operating hours. The first major overhaul is planned for 30,000 hours.

4.2.3.3.2 Hargis-Hebert Unit 2

Unit 2 received borescope inspections in the spring and fall of FY 2023. In Spring of 2023, the Unit 2 combustion turbine underwent a borescope inspection conducted by TransCanada. At the time of the inspection, Unit 2 had experienced 1,548 fired starts and 20,235 fired hours. In Fall of 2023, the Unit 2 combustion turbine underwent a borescope inspection conducted by TransCanada. At the time of the inspection, Unit 2 had experienced 1,593 fired starts and 21,205 fired hours. During the borescope inspection, the inlet/compressor, combustion, turbine, and exhaust sections were evaluated. All sections were considered serviceable, and no major concerns were noted.

In 2012, Unit 2 received a hot section exchange performed by GE. At the time of the inspection, Unit 2 had experienced 14,680 operating hours and an unreported number of starts. The whole hot section was overhauled for the inspection. Repairs were made to the gaskets and oil pumps, and the unit was returned to good operating condition.

The unit has not yet received a major overhaul given its limited operating hours. The first major overhaul is planned for 30,000 hours.

4.2.3.4 Fuel Supply

Natural gas is delivered to Hargis-Hebert at pressures in the range of 675 psig plus or minus 20 psig. Hargis-Hebert does not have compressors, but the plant does have dew point heaters. The natural gas is delivered through a fuel gas strainer, gas flow meter, a primary and secondary shut off valve, a fuel gas manifold, and goes to the fuel nozzles.

Natural gas from the Gulf South pipeline is procured on behalf of LUS by TEA who also bids the units in as MISO market participants. The quantity and price of gas is determined daily based on day-ahead nominations. Hargis-Hebert does not have firm gas supply.

4.2.3.5 Plant Transmission Delivery

Power is generated by two 72 MVA, 13.8 kV turbine generators. Each generator sends electricity to a GSU transformer via cable bus systems. The GSUs at Hargis-Hebert step the 13.8 kV power up to 69 kV. Each of the turbine generators also send electrical power to auxiliary transformers that drop the voltage down to 4.16 kV. The 4.16 kV from the auxiliary transformers is sent to the MV switchgear where it is relayed to the station service transformers and the chiller system. The station service transformers further step down the voltage from 4.16 kV to 480 V for station auxiliaries such as fans, pumps, and motors.

4.2.3.6 Water Supply

Water treatment at each site consists of chemical treatment, GAC pre-filtration, cartridge filtration, reverse osmosis, and mixed bed demineralizer systems. The water treatment system is used to meet the facilities’ 143 gpm makeup water requirement for lost system water due to cooling towers, water injection for NO_x control and for the SPRINT system.

At each site, the city water supply is delivered under pressure to the inlet of the pre-filtration skid. Prior to entering the filtration system, the feed water supply is dosed with sodium meta bisulfite to remove chlorine. The GAC filter removes organic matter and any residual chlorine from the feed water supply prior to its use in the reverse osmosis system. The reverse osmosis system removes most of the dissolved solids from the feed water by using a high-pressure pump to force water through a membrane that removes contaminants behind. Each reverse osmosis train consists of two passes. The second pass outlet is tied to a mixed bed demineralizer which removes the remaining dissolved solids and silica from the feed water. The demineralized water is stored in a 180,000-gallon storage tank. Each site contracts with a third party to regenerate the mixed bed and carbon filters. Due to low water pressures, the City has recently added a well near the Hargis-Hebert site that is untreated. The location of the well causes a higher percentage of untreated water to be supplied to Hargis-Hebert and the conductivity of the water is too high for the reverse osmosis system. Hargis-Hebert has recently installed carbon filters and Greensand filters to manage conductivity.

4.2.3.7 Plant Staffing and Operations

The facility is staffed 24 hours per day, 7 days a week, but can also be started and monitored remotely at the T.J. Labbe facility.

4.2.3.8 Environmental Permits

The Hargis-Hebert plant holds current air permits for Title V and Acid Rain, as shown in Table 4-11. The facility's current Title V and Acid Rain permits expire on July 7, 2028. The Acid Rain permit requires quarterly reports on emissions of NO_x, SO_2, and CO_2. NO_x from the turbines is measured by CEMS. The turbines are classified as "gas-fired" under Acid Rain since fuel oil combustion is less than 10 percent of the annual capacity. However, the turbines may exceed this 10 percent threshold and become classified as "oil-fired." Additional monitoring would be required as "oil-fired" units. However, the units do not currently have the ability to operate using fuel oil.

The Title V permit includes limits that make the facility a minor source for the PSD program by limiting emissions of CO and NO_x. The facility is a minor source of HAPs. The two turbines can burn natural gas, and the one black start generator burns fuel oil. The permit allows the facility to operate as a peaking plant, meaning that while actual emissions are low, the permit allows for significant operation as needed as long as the ton per year limits are not exceeded. The current Title V permit sets CO emissions to 248.07 tpy and NO_x emissions to 242.11 tpy. These values utilize the 2021 emissions testing that occurred on the U-1 and U-2 turbines in the emissions calculations. The emissions inventory for the site is due in April of the following year. The emissions inventory is submitted to the Emissions Reporting and Inventory Center (ERIC) website, maintained by the LDEQ. The CY2023 inventory for Hargis was submitted in early March 2024. Actual emissions for 2022 were less than 22 tons NO_x. The Title V permit allows fuel oil operation even though the turbines are not capable of burning fuel oil without a physical modification.

As shown in Table 4-12, Hargis-Hebert holds sufficient allowances for its 2023 emissions under the CSAPR for the May to September ozone season, based on previous years' operation. A separate CSAPR permit is not required.

No excess emission event or deviations occurred in 2023 and no NOVs were issued. All required quarterly, semi-annual, and annual reports were submitted as required.

Table 4-11: Hargis-Hebert Air Permits

Permit Description	Permit Number	Issue Date	Expiration Date	Renewal Application Deadline
Title V Operating Permit	1520-00128-V4	July 7, 2023	July 7, 2028	January 7, 2028
Acid Rain Permit	1520-00131-IV3	July 7, 2023	July 7, 2028	January 7, 2028

Source: LUS

Table 4-12: Hargis-Hebert NO_x Emission Allocations

NO_x Allowances Held at the Start of 2023 (tons)	Initial Allocations into the CSAPER Expanded Group 2 (tons)	2023 Ozone Season NO_x Emissions (tons)	SO_2 Allowances Held at the Start of 2023
43[a]	20[b]	16	1,311

Source: LUS

(a) These balances were transferred into Hargis-Hebert's account for the Expanded Group 2

(b) 10 tons were put into Hargis-Hebert's account for both 2023 and 2024

As discussed above in section 4.2.2.8, the EPA has established their Good Neighbor Plan (GNP) which mandates emission reductions for states to achieve the 2015 ozone NAAQS. The final rule put sources in Louisiana and Kentucky into an expanded Group 2 on an interim basis as a result of the court's stay of the EPA's rejection of the Louisiana SIP for the 2015 ozone NAAQS. However, the Group 2 trading program regulations for these two states were modified to maintain state emissions budgets, unit-level allowance allocation provisions, and banked allowance holdings. The revision also made the allowances for Kentucky and Louisiana in the updated Group 2 trading program non-interchangeable with the allowances utilized by Group 2 powerplants in other states. This revised Good Neighbor Rule took effect on August 4, 2023. Historical ozone season NO_x emissions indicate that it may be necessary for LUS to purchase additional NO_x allocations. The GNP Rule implements a cap-and-trade program similar to previous interstate air pollution plans. Any shortfall in allocations will need to be purchased on the market. For comparison, the past four years of emissions data as recorded by the EPA have varied from a low of 5.4 per generating unit to a high of 19.3 per generating unit.

4.2.4 Rodemacher Unit 2

4.2.4.1 Plant Description

Rodemacher Unit 2 is a coal-fired steam electric generating unit located at the Brame Energy Center in Lena, Louisiana with an output of approximately 523MW (gross). Rodemacher Unit 2 entered commercial operation in 1982 and is jointly owned by LPPA (50 percent), Cleco (30 percent), and LEPA (20 percent). LPPA's ownership share of Rodemacher Unit 2 is 261.5 MW of capacity and the related energy output. Rodemacher Unit 2 is operated by Cleco, but each owner dispatches their share of the total capacity. Each owner self-schedules Rodemacher Unit 2 at minimum load and then economically dispatches the remaining capacity into the MISO market. LPPA has a power sales contract with the City of Lafayette in which the City agrees to purchase all of LPPA's share of the capacity and energy produced by Rodemacher Unit 2.

The Joint Ownership Agreement defines the LPPA's authority regarding decision making and operation of Rodemacher Unit 2. Cleco is required to provide relevant information to the Joint Owners regarding finances, operations, and future decisions. The Joint Owners require more than 50 percent ownership approval for any major changes regarding operations or finances. LPPA's 50 percent ownership stake provides the authority to reject major changes or request further analysis. This reduces the risk of the other owners could make changes that would adversely impact LPPA. The Joint Owners Agreement is effective through June 30, 2032.

Rodemacher Unit 2 generates electric power using a pulverized coal-fired, natural circulation, reheat boiler manufactured by Foster Wheeler. The boiler has a maximum continuous rating ("MCR") of 3,800,000 pounds per hour ("lb/hr") of steam at the superheater outlet pressure of 2,620 pounds per square inch gauge ("psig") and temperature of 1,005 degrees Fahrenheit ("°F"). The reheater is designed for an operating temperature of 1,005°F. The coal arrives on site via rail with rotary dump cars. Coal is prepared for the boiler by five roller wheel coal mills.

The boiler has a balanced draft furnace with combustion air being supplied by two 50-percent forced draft fans. The boiler was initially designed to burn various types of coal and natural gas, but primarily burns Powder River Basin ("PRB") coal and starts up on natural gas. Rodemacher Unit 2 has one motor driven startup boiler feed pump capable of allowing the unit to achieve approximately 330 MW and one 100 percent capacity turbine driven boiler feed pump capable of operating between minimum load and full load. Feedwater and condensate are heated to economizer inlet conditions utilizing four low pressure ("LP") feed water heaters ("FWHs"), a deaerator ("DA"), and two high pressure ("HP") feedwater heaters. Rodemacher Unit 2 also utilizes a GE steam turbine generator (“STG”), which is a four casing, single reheat, tandem compound, four flow condensing unit. The generators are rated at 496 MVA. Cooling water for the Unit is circulated through a two-shell single pass condenser. Cooling water for the steam turbine condenser and closed cooling water system is supplied by Lake Rodemacher. Lake Rodemacher is a man-made lake built specifically for Brame Energy Center.

For emissions controls, Rodemacher Unit 2 utilizes a selective non-catalytic reduction (“SNCR”) system with urea injection for NO_x reduction and an electro-static precipitator (“ESP”) for 99.5 percent removal of fly ash. Rodemacher Unit 2 also uses a dry sorbent injection system for acid gas control and added a fabric filter baghouse for additional particulate emissions controls to comply with EPA Mercury and Air Toxic Standards (“MATS”) requirements.

4.2.4.2 Performance and Statistics

Table 4-13 summarizes the historical operating statistics for the last five years for Rodemacher Unit 2.

Table 4-13: Rodemacher Unit 2 Historical Operating Statistics

	2019	2020	2021	2022	2023	Five-Year Average
Gross Generation (MWh)	2,532,781	1,614,522	2,480,497	2,247,810	1,926,574	2,160,437
Station Service (MWh)	263,630	222,178	236,802	233,662	241,529	239,560
Net Generation (MWh)	2,269,151	1,392,344	2,243,695	2,014,148	1,685,045	1,920,877
Station Service (%)	10.4%	13.8%	9.5%	10.4%	12.5%	11.3%
Net Capacity Factor (%)	52.6%	32.1%	26.0%	46.4%	38.9%	39.2%
Hours Available	7,923	6,207	14,015	6,782	7,641	8,514
Net Unit Heat Rate (Btu/kWh)	11,085	12,284	11,461	11,431	11,866	11,625
Availability Factor (%)	90.1%	69.7%	80.2%	77.4%	87.2%	80.9%
Forced Outage Factor (%)	2.4%	5.7%	5.1%	0.4%	2.5%	3.2%
Scheduled Outage Factor	8.1%	21.9%	18.9%	8.9%	12.2%	14.0%

Source: LPPA Manager’s Monthly Reports

Rodemacher Unit 2 has been a relatively reliable unit with an average Forced Outage Rate of 3.2 percent over the last five years. In 2023, the forced outage rate and capacity factor were in line with previous years. While market energy prices and fuel costs were much higher throughout 2022, which would have otherwise resulted in higher levels of production, the unit capacity factor remained low due to persistent coal availability and delivery challenges throughout most of FY 2022. Rail transportation was constrained through most of FY 2022 but recovered in FY 2023. The Rodemacher Unit 2 coal inventory has also recovered from its multi-year lows in FY 2022. LPPA and LUS will continue to be making decisions on production over the coming years based on the unit economics, emission allowances, and fuel availability.

4.2.4.3 Recent and Planned Upgrades and Maintenance

A major steam turbine inspection is scheduled every six years, which is in line with industry standards. Rodemacher Unit 2 underwent a major steam turbine overhaul in the fall of 2020. This included maintenance activities associated with the main turbine values, inspection of turbine components, and replacing a row of LP turbine blades. The total outage duration was 102 days. Turbine valve inspections and a turbine chemical cleaning is planned for the spring 2024 outage.

Rodemacher Unit 2 has continued to monitor and maintain the boiler tubes and duct work. The last boiler was completed in the Spring 2023 outage. Tube samples are taken annually to determine when chemical cleaning is needed. The drum is inspected annually, and no major issues have been found.

During 2023, the Joint Owners completed various maintenance and repairs to Rodemacher Unit 2 including a bottom ash controls upgrade, 6.9kV switch gear protection, sootblower upgrades, a LPSW strainer replacement, baghouse bag and cage replacement, HRA inspections and repairs, and pulverizer repairs. Burns & McDonnell engineers spent several weeks at Rodemacher for various O&M projects in FY 2023. Based on discussions with Burns & McDonnell engineers, the plant continues to be well maintained and operated by the Rodemacher plant staff.

The Joint Owners have approved and are planning to complete several maintenance and repair projects to Rodemacher Unit 2 including turbine valve inspection, HRA inspections and repairs, internal boiler ductwork, pulverizer repairs, cleaning the main and auxiliary condensers, outage required reactive orders, air heater wash, and grit blast of the precipitator. Many of these small projects will be completed in the 2024 spring or fall outages.

The Joint Owners don’t have any other major maintenance projects planned for Rodemacher Unit 2 over the next 5 years.

4.2.4.4 Fuel Supply and Ash Handling

The Joint Owners purchase coal from Arch Coal Sales, Inc., Navajo Transitional Energy Company (“NTEC”), Peabody COALSALES, LLC, and Coal Network, LLC. Peabody coal that is currently under contract for delivery to Rodemacher Unit 2 is being sourced from the North Antelope Rochelle Mine while NTEC coal is being sourced from the Antelope Coal Mine. LPPA owns two unit-trains for rail transportation to the facility. The existing contracts allow the coal to either be rejected or allow for a price adjustment if the heat content is too low or the sulfur content is too high. The bottom ash and fly ash from Rodemacher Unit 2 is removed from site by truck and sold for beneficial reuse by Charrah, Inc. The Joint Owners have an agreement with Charrah, Inc. through 2025.

4.2.4.5 Plant Transmission Delivery

Rodemacher Unit 2 sends electric power from the switch station via five transmission lines, all of which operate at 230kV. The transmission lines service Clarence, Leesville, Rapides, Sherwood, and St. Landry. LUS has had a firm transmission agreement for the plant since it was commissioned. LUS decided to terminate the firm transmission agreement with Cleco. After the end of the contract, LUS realized an increase in network integrated transmission service ("NITS") cost. The total annual net savings to LUS from the reduction in Cleco transmission charges and increased NITS charges is approximately $6 million per year.

4.2.4.6 Water Supply

Water is supplied from Lake Rodemacher. The water is pretreated with ultra-filtration ("UF") and then sent through a RO and a demineralizer. There are two 250,000-gallon aluminum tanks that hold the demineralized water. Hydrazine and phosphate are used to treat boiler water in the drum. The lake is self-contained and is not subject to Clean Water Act, Section 316(b) requirements.

4.2.4.7 Plant Staffing and Operations

Cleco provides maintenance and operations staffing for Rodemacher Unit 2. The unit is staffed 24 hours a day, 7 days a week.

4.2.4.8 Future Decommissioning

Rodemacher Unit 2 would require significant modifications by 2028 to comply with CCR and effluent limitation guidelines (ELG) rules and continue to operate utilizing coal. Due to the cost associated with these modifications, LUS and the other Joint Owners have decided that prior to the required compliance date, Rodemacher Unit 2 will be retired from service. The Joint Owners have decided to retire the unit and are currently preparing to decommission the plant in 2028. LUS will be responsible for 50 percent of the total cost to close the plant which is estimated at $19.5 million (2028 dollars). In addition to the plant decommissioning cost, LUS is already spending approximately $12 million for pond closure cost before the end of FY 2028 and has already incurred $5.8 million in costs for that project.

4.2.4.9 Environmental Permits and Compliance

4.2.4.9.1 EPA Clean Air Act Greenhouse Gas Regulation

On January 19, 2021, the United States Court of Appeals for the District of Columbia Circuit vacated the Trump Administration's Affordable Clean Energy ("ACE") Rule, which had in turn replaced the Clean Power Plan ("CPP") of the Obama Administration. The current EPA is undertaking a new rulemaking to establish emission guidelines for existing fossil fuel-fired electric generating units (EGUs) under CAA 111(d). The EPA issued a proposed rule in May of 2023 for Emissions Guidelines for Greenhouse Gas Emissions from Existing Fossil Fuel-Fired EGUs and New Source Performance Standards for new EGUs under CAA 111(b) for greenhouse gas emissions. Virtual public hearings were held on June 13, 14, and 15, 2023 on the proposed rule and the EPA extended the public comment period to August 8, 2023. On November 20, 2023, the EPA solicited comments on an Initial Regulatory Flexibility Analysis (IRFA) for this rule to gather additional input on the rule.

The proposed rule would set limits for existing coal, oil and gas-fired steam generating units, which would potentially apply to the existing Rodemacher 2 boiler at Brame Energy Center. The limits/requirements under this proposed regulation for existing coal units are based on planned retirement year and capacity. The regulations provide limits for the higher capacity coal units that will retire in future years that include limits that are based on carbon capture and sequestration/storage (CCS), low-GHG hydrogen co-firing, and natural gas co-firing methods and technologies, which can be applied to power plants that use fossil fuels to generate electricity.

In the rule, as it is currently written, the EPA establishes a hierarchy of emissions limit guidelines depending on several factors:

- Type of EGU (utility boiler vs combustion turbine)
- Fuel Source (coal-fired or natural gas-fired)
- Operating horizons
- Operating load (base, intermediate, or low/peaking)

Based on how an EGU falls into these categories, the EPA would generally require more CO_2 emissions control at high-use facilities starting in 2030 and then would phase in more facilities and more strict CO_2 controls.

The state agency will then develop a State Implementation Plan (SIP) for the rule on identifying state-specific thresholds and policies and develop a "Best System of Emission Reduction" (BSER) analysis program to comply with the federal rule.

The proposed rule has not been finalized and promulgated in the Federal Register, and the state of Louisiana has not established a SIP; therefore, it is unknown at this time how the rule will impact Rodemacher 2.

In addition to this rule, the EPA has proposed a New Source Performance Standard (NSPS), Subpart TTTTa. Under this proposed rule, imminent-tern existing fossil fuel-fired steam generating units that are committed to shutting down before 2032 must perform routine methods of operation and maintenance without increases emission rates until decommissioning. These facilities must also elect to make the commitment to retire a part of the federally enforceable state plan. The EPA has been soliciting comments and has not finalized this rule.

4.2.4.9.2 EPA “Good Neighbor Rule” and the 2015 Ozone NAAQS

When the 2015 Ozone NAAQS was promulgated, 26 states had to submit a State Implementation Plan (SIP) outlining the state’s plan to meet the applicable requirements of the rule. Louisiana was one of these states and had until October 1, 2018, to submit the SIP for the new rule. Louisiana submitted a SIP on November 13, 2019, for the 2015 Ozone NAAQS. The EPA officially disapproved Louisiana’s SIP (along with 18 other states) in early 2023, but this disapproval was stayed shortly after. After the stay, the edited Good Neighbor Plan (GNP) was published in the federal registrar on June 5, 2023, and became effective as of August 4, 2023. In the final version of the GNP, Louisiana and Kentucky were put into an expanded Group 2 trading program. This Group 2 trading program regulations for these two states were modified to maintain state emissions budgets, unit-level allowance allocation provisions, and banked allowance holdings in the new expanded Group 2 designation. The revision also made the allowances for Kentucky and Louisiana in the updated Group 2 trading program non-interchangeable with the allowances utilized by Group 2 powerplants in other states.

Historical ozone season NO_x emissions indicate that it will be necessary for LPPA to purchase additional NO_x allocations. The GNP Rule implements a cap-and-trade program similar to previous interstate air pollution plans. Any shortfall in allocations will need to be purchased on the market. For comparison, emissions data as recorded by the EPA has varied over the past 5 years from a high of 1488 allocations in 2018 to a low of 674 in 2017.

The GNP Rule additionally includes backstop emission limits for “large” coal plants. Unit 2 meets this definition as the nameplate capacity is equal to or exceeds the 100 MW threshold for a “large” unit and is not a circulating fluidized bed unit. The rule requires these coal-fired units to meet a daily emission rate of 0.08 lb/mmBtu NOx during the ozone season. For plants with existing SCR controls, the backstop daily rate will begin in the 2024 control period. Unit 2 utilizes an SNCR and would need to install SCR controls, therefore the backstop daily rate will begin the earlier of the 2030 control period or the control period after which an SCR is installed. With the 2027 retirement and decommissioning date for Rodemacher Unit 2, it is not expected that the unit will need to comply with these emission rates nor install an SCR. However, verification that retirement and decommissioning will exempt a unit from this rule should occur.

4.2.4.9.3 Environmental Permits and Compliance

Table 4-14 summarizes the key environmental permits for Rodemacher Unit 2.

Table 4-14: Rodemacher Unit 2 Key Permits

Permit Description	Permit Number	Regulatory Authority[1]	Expiration Date	Renewal Application Deadline
Title V Operating Permit[2]	2360-00030-V4	LDEQ	February 20, 2024	August 20, 2023 ; Administrative Completeness received July 24, 2023
Acid Rain Permit[2]	2360-00030-IV4	EPA	February 20, 2024	August 20, 2023; Renewal submitted July 10, 2023
LPDES Permit[3]	LA0008036	LDEQ	September 30, 2019	Submitted March 13, 2019, Numerous addenda 2020-2023
Solid Waste Standard Type I Permit (metal cleaning waste pond, bottom ash pond, and fly ash pond)	P-0005R1	LDEQ	November 18, 2026	Must renew every 10 years.
Solid Waste Standard Type I (coal sedimentation pond)	P-0062R1	LDEQ	November 18, 2026	Must review every 10 years.
Radioactive Material License	LA-3719-L01	LDEQ	May 31, 2028	30 calendar days prior to expiration
Spill Prevention and Control - Spill Prevention, Control, and Countermeasure ("SPC-SPCC") Plan	N/A	EPA	Last revised July 2021	Plan review must be completed every 5 years.
Hazardous Waste Generator ("RCRA")[4]	LAD071941611	EPA	N/A	N/A

Source: LUS

[1] LDEQ = Louisiana Department of Environmental Quality, EPA = U.S. Environmental Protection Agency

[2] Facility is operating under permit shield. Renewal applications and Administrative Completeness received before the application deadline. Facility is waiting on LDEQ for final permits.

[3] Facility operating under existing Louisiana Pollutant Discharge Elimination System (LPDES) permit (administratively continued)

[4] RCRA = Resource Conservation and Recovery Act

4.2.4.9.4 National Ambient Air Quality Standards

The Clean Air Act requires EPA to set National Ambient Air Quality Standards ("NAAQS") for pollutants that are common in outdoor air, considered harmful to public health and the environment.

Rapides Parish is currently designated as attainment for all criteria pollutants; however, the Parish to the south (Evangeline) is non-attainment for SO_2. EPA updates the NAAQS every five years. The $PM_{2.5}$ NAAQS has been subject of current scientific inquiry in the past several years. On January 6, 2023, the EPA announced a proposed decision to lower the annual $PM_{2.5}$ NAAQS from its current level (set at 12.0 micrograms per cubic meter (µg/m^3) to a value between 9.0 µg/m^3 and 10.0 µg/m^3. In February of 2024, the EPA set the new annual PM2.5 NAAQS to 9.0 µg/m^3. It is currently unknown what the exact effects of this lowering of the annual standard will have on the facilities owned and operated by LUS. It is likely that this new standard will create new non-attainment areas in Louisiana and could affect the operation of any coal-fired boiler in the state. Additionally, air dispersion modeling of this standard will be more difficult, potentially requiring higher stacks or additional particulate controls for the addition of new equipment at an existing facility. However, with the planned retirement of the Rodemacher Unit, this new, lower standard is less of a concern for this site.

4.2.4.9.5 Air Emissions and Opacity Limitations

Unit 2 operates utilizing coal, natural gas, and number 6 fuel oil to generate up to 523 MW (gross). Emissions are controlled by activated carbon injection, dry sorbent injection, fabric filter baghouse, and a selective non-catalytic reduction control device.

SO_2 and NO_2 emissions are covered in the Acid Rain permit. Emissions are lower than the limits, as presented in Table 4-15 and Table 4-16. The SO_2 limit was lowered to comply with the Regional Haze Rule State Implementation Plan. Emissions controls were added to comply with CSAPR and MATS. The SNCR has been installed and is used during the ozone season (May 1 to September 30). Rodemacher received 995 tons for the NO_x ozone season allocations in 2020. For 2021, 2022, and 2023 Rodemacher 2 will only receive 875 NO_x ozone season allocations. LUS will monitor the run hours during the ozone season to stay below the allocations issued to LPPA. Based on the information provided, LPPA has sufficient allowances to cover the NOx emissions for 2023. LPPA should have approximately 81 allowances in the bank prior to allowance distribution of 2024.

The final CSAPR changes were signed March 15, 2021, which encourage plants to increase use of NO_x controls by turning them on more often and/or using more reagent to achieve a lower NO_x rate when they are operating. Rodemacher 2 will likely need to increase use of the SNCR to decrease emissions.

No excess emission event occurred in 2023 and no NOVs were issued. All required quarterly, semi-annual, and annual reports were submitted. No deviations were reported for 2022.

Table 4-15: LPPA Rodemacher Unit 2 SO_2 Emissions

Year	Annual Average (lb/MMBtu)	Permit Limit (lb/MMBtu)	Total Annual (tpy)	Annual Allocation (tpy)
2019	0.24	0.3	3,040	18,212
2020	0.24	0.3	1,649	18,212
2021	0.25	0.3	1,520	18,212
2022	0.24	0.3	1,678	18,212
2023	0.23	0.3	1,062	18,212

Source: LUS

Table 4-16: LPPA Rodemacher Unit 2 NO_2 Emissions

Year	Annual Average (lb/MMBtu)	Permit Limit (lb/MMBtu)	Total Annual (tpy)	Ozone Season (tpy)
2019	0.22	0.46	2,706	1,033
2020	0.18	0.46	1,257	699
2021	0.21	0.46	1,180	659.39
2022	0.20	0.46	1,360	376.05
2023	0.19	0.46	814.3	814.3

Source: LUS

4.2.4.9.6 Allocations

Brame Energy Center held sufficient allowances for its emissions, as shown in Table 4-17.

Table 4-17: Rodemacher Unit 2 Emission Allocations (LUS Portion Only)

2023 NO_x Allowances Allocated (tons)	2023 Ozone Season NO_x Emissions (tons)	2023 SO_2 Allowances Allocated (tons)	2023 SO_2 Emissions (Tons)
437.5	356.31	9,106	1,062

Source: LUS, Acid Rain Database

4.2.4.9.7 Cooling Water Supply and 316(b) Regulation

Cooling tower and boiler makeup water is pumped from a screened water intake structure at Lake Rodemacher. Rainfall and storm water runoff provides makeup to Lake Rodemacher for water lost to evaporation. As determined by LDEQ, Lake Rodemacher is not subject to Section 316(b) of the Clean Water Act because it was constructed to support power generation operations and is not considered "waters of the State."

4.2.4.9.8 Wastewater Discharge Permit

LPDES Permit No. LA0008036 authorizes the discharge of operational wastewater and storm water from the Brame Energy Center to surface waters of the State. It also establishes monitoring, reporting, and recordkeeping requirements for wastewater and storm water discharges, including effluent limitations specific to wastewater types and outfall locations. Although the LPDES Permit expired on September 30, 2019, a timely renewal application was submitted on March 13, 2019, and the conditions of the expired permit are administratively continued until the effective date of a new permit, as governed by LAC 33:IX.2321. Cleco responded to information requests from LDEQ in March, May, and July 2021 to support development of the new draft LPDES Permit.

On June 29, 2021, LDEQ provided Cleco with a working draft of the proposed LPDES Permit for Cleco's technical review. Cleco's consultant, CK Associates, responded on July 8, 2021, stating that the preliminary draft permit has significant changes from the expired LPDES Permit that require revision, as detailed on the Worksheet for Technical Review provided by LDEQ. CK Associates further responded on July 14 and 19, 2021 with additional information to address opposition to proposed new pH monitoring at internal Outfalls 801 and 901, which were added to demonstrate compliance with EPA's Effluent Limitation Guidelines.

Between 2021 and 2023, Cleco submitted additional addenda to the LPDES Permit renewal application, submitted on March 13, 2019. On July 22, 2021, an addendum to update the long-term average total lead concentrations to be used in the water screening model was submitted in which Cleco conducted three additional sampling and analysis events for total lead at Outfall 001, and the results were non-detect at the Minimum Quantification Level for total lead (<2 μg/L). On February 9, 2022, Cleco submitted two permit application addenda: in the first, data for whole effluent toxicity (WET) testing and a priority pollutant scan from the 001 discharge location (although the outfall was not actually discharging) to demonstrate that a toxicant was not present and the proposed Outfalls 01A and 01B added to the preliminary draft permit were not necessary. In the second submittal on February 9, 2022, Cleco noted that the more stringent copper limits included in the preliminary draft permit were derived using low flow and total suspended solids (TSS) values for the receiving stream that would not occur during discharge, since Outfall 001 only discharged during high rainfall events. Cleco also responded to LDEQ's questions on January 17, 2023, explaining that Unit 3 was a circulating fluidized bed (CFB) and did not generate bottom ash.

Based on review of the EPA ECHO and LDEQ online systems, Rodemacher 2 has no outstanding NOVs, or material compliance issues associated with the LPDES Permit.

The EPA ECHO database indicated there were no effluent limit exceedances recorded.

4.2.4.9.9 Wastewater Effluent Limitation Guidelines

When a 2009 study found the ELGs, established in 1982, to be ineffective to address metals and other pollutants discharged from steam electric power generating facilities, the EPA finalized new ELGs (40 CFR 423) on September 30, 2015, which focused on wastewater streams generated by coal-fired steam electric plants: flue gas desulfurization (FGD), fly ash, bottom ash, flue gas mercury control, and gasification of fuels including coal and petroleum coke. In September 2017, the compliance dates for FGD wastewater and bottom ash transport water ELGs were postponed for two years to allow EPA additional time to review and reconsider the rule for these two effluent streams. However, November 1, 2018, compliance date for fly ash transport water and flue gas mercury control wastewater remained in effect. Cleco indicated that the ELGs for these two wastewater streams are met with existing plant equipment and procedures.

In November 2019, the EPA issued the 2019 Proposed Revision to the Steam Electric Effluent Guidelines for FGD wastewater and bottom ash transport water, which changed the technology basis for treatment of these effluent streams, revised the voluntary incentives program for FGD wastewater, and added subcategories for high-low facilities, low utilization boilers, and boilers retiring by 2028. The 2019 revision established a December 31, 2023, compliance deadline for bottom ash transport water and a December 31, 2025, compliance deadline for FGD wastewater. These proposed revisions were finalized as the 2020 Steam Electric Reconsideration Rule, were published in the Federal Register on October 13, 2020, and became effective on December 14, 2020.

On January 8, 2021, Cleco submitted responses to LDEQ's request for additional information, including a copy of Rodemacher Unit 2's Notice of Planned Participation per 40 CFR 423.19(f) to permanently cease combustion of coal by December 31, 2028. As communicated to LDEQ, Cleco plans to permanently cease coal-fired operation of Rodemacher Unit 2, the only unit at the facility that discharges bottom ash transport water, by the third quarter of 2027 in order to achieve complete closure of the associated CCR impoundments prior to the October 17, 2028, CCR Part A deadline. Therefore, the facility would be classified as an Electric Generating Unit ("EGU") Permanently Ceasing Coal Combustion ("PCCC") by December 31, 2028.

In 2021, upon review of the 2020 Steam Electric Reconsideration Rule and finding opportunities for improvement, the EPA initiated a supplemental rulemaking to strengthen certain discharge limits in the Steam Electric Power Generating category (40 CFR Part 423). On March 8, 2023, the EPA released a pre-publication version of its proposed rule; public comment on the proposed rule will be open for 60 days after publication in the *Federal Register.* The current regulations—both the 2015 and 2020 rules—will be implemented and enforced while this supplemental rulemaking is in development. Among other requirements, the pre-publication ELGs include additional requirements to make data available to the public through a website. Data must be posted within 30 days of submittal to the regulatory agency and includes requirements for combustion residual leachate monitoring for 18 analytes.

LDEQ has previously communicated to Cleco that the final 2020 ELGs will be implemented in the renewed LPDES Permit. However, there is currently no due date to finalize the 2023 ELGs.

4.2.4.9.10 Coal Combustion Residuals – EPA Compliance

On December 19, 2014, the EPA finalized the Coal Combustion Residuals ("CCR") Rule, and it was published in the Federal Register (40 CFR 257) on April 17, 2015, and became effective on October 14, 2015. Rodemacher Unit 2 has two surface impoundments (Fly Ash Pond and Bottom Ash Pond) subject to the CCR Rule. Because the final CCR Rule classifies coal ash as solid waste rather than hazardous waste, Rodemacher Unit 2 continues to market and sell most of its fly ash and bottom ash for beneficial use. Although the CCR Rule redefined beneficial use, it does not affect beneficial use applications that were initiated before October 2015.

The CCR Rule also establishes minimum criteria for CCR landfills, CCR surface impoundments, and all lateral expansions of CCR units, including location restrictions, liner design criteria, structural integrity requirements, operating criteria, groundwater monitoring and corrective action requirements, closure and post-closure care requirements, and recordkeeping and notification requirements. CCR surface impoundments that do not receive CCR after the effective date of the rule, but still contain water, are still subject to applicable regulatory requirements.

The final CCR Rule required the owner or operator of an existing CCR surface impoundment to document, no later than October 17, 2016, whether the impoundment was constructed to meet the liner requirements included in 40 CFR 257.71. To comply with this requirement, Cleco obtained certification from a qualified professional engineer (Providence Engineering and Environmental Group LLC) attesting that both the Fly Ash Pond and the Bottom Ash Pond meet the requirements of the final CCR Rule.

On December 2, 2020, Cleco notified LDEQ of its intent to comply with the site-specific alternative to initiation of closure due to permanent cessation of a coal-fired boiler by a certain date for the Bottom Ash Pond at the Brame Energy Center, pursuant to 40 CFR § 257.106(i)(18). In accordance with 40 CFR § 257.103(f)(2), Cleco submitted a demonstration seeking to qualify for these alternative closure requirements to the EPA on November 12, 2020. A revised demonstration was submitted to the EPA on

November 25, 2020. The EPA made notification on January 11, 2022, that the demonstration met the completeness requirement and that it would continue evaluating the request for approval.

Additionally, a CCR Groundwater Monitoring Program, including a network of five upgradient and four downgradient monitoring wells, was established to verify the integrity of the pond liners, as required by 40 CFR 257.91 of the CCR Rule. The 2021 Annual Groundwater Monitoring Report was completed in January 2022, which indicates that no confirmed Statistically Significant Increases ("SSIs") were observed in downgradient/compliance wells.

Annual inspections of the Fly Ash Pond and Bottom Ash Pond were conducted in December 2021 by Providence Engineering and Environmental Group LLC. The Fly Ash Pond inspection found the reservoir to be in satisfactory condition, and no corrective actions were required. The Bottom Ash Pond inspection report states that the reservoir and slopes are in satisfactory condition, and no corrective actions were required. Annual inspections and maintenance will continue until pond closure is complete.

Additionally, Cleco submitted the following documents in 2021 to the EPA for the Bottom Ash Pond and Fly Ash Pond in accordance with the CCR Rule: Annual Fugitive Dust Report, Hazard Potential Assessment, Safety Factor Assessment, Structural Stability Assessment, and Inflow Design Flood Control Plan.

4.2.4.9.11 Coal Combustion Residuals – LDEQ Compliance

In conformance with the Louisiana Solid Waste Regulations (LAC 33:VII), Cleco developed a Closure Plan for both the Fly Ash Pond and Bottom Ash Pond (Type 1 Surface Impoundments), both dated October 2016. A Revised Closure Plan for the Fly Ash Pond was submitted to the LDEQ for review in September 2021. The revised plan includes an update to the final closure methodology for the Fly Ash Pond to comply with the Federal CCR Rule. Cleco intends to complete the closure activities in 2024 and plans to convert the area to a non-CCR landfill as part of the existing landfill onsite. LDEQ performed a technical review of the Revised Closure Plan and provided comments on February 1, 2022, regarding items not considered in conformance with the applicable sections of LAC 33:VII.

On June 15, 2021, Cleco provided notice to LDEQ of the installation of a temporary ash storage and dewatering area. A concrete-lined temporary ash storage area was constructed in late 2021 near the northwest levee of the Bottom Ash Pond to temporarily store and handle fly ash, abrasives, sodium carbonate (tank bottoms), neutralized waste/fly ash, and spent activated carbon/Trona. These are materials that would normally have been sent to the Fly Ash Pond. The material stored in the temporary storage area is dry upon placement and contact storm water is collected in an engineered sump, pumped to the

Bottom Ash Pond, and eventually discharged in accordance with the LPDES Permit. The temporary storage area is only used during plant outages and is not designed to permanently dispose of any solid waste. Vacuum trucks can unload on this temporary storage pad, and when there is enough ash accumulated to justify a trip to the offsite landfill, or the precipitator maintenance activities are complete, the plant will load the material into a standard haul truck.

In accordance with Rodemacher's Solid Waste Standard Permit Type 1 (P-0005RI), Cleco is also required to submit semi-annual groundwater monitoring results for the Metal Cleaning Waste Pond, Bottom Ash Pond, and Fly Ash Pond. The Brame Energy Center is split into two groundwater monitoring systems: the "ash ponds" on the eastern side of the site and the "metal ponds" on the western side. Twenty-one groundwater monitoring wells are located adjacent to the solid waste permitted facilities. The results of the May 2021 sampling event were submitted in the First Half 2021 Groundwater Monitoring Report to the LDEQ in August 2021. The results of the October 2021 sampling event were submitted in the Second Half 2021 Groundwater Monitoring Report to the LDEQ in January 2022.

Additionally, LDEQ provided comments on Cleco's 2021 Groundwater Assessment Work Plan on September 21, 2021.

4.2.4.9.12 Oil Storage and Spill Prevention

The SPC-SPCC Plan for the Brame Energy Center was written in accordance with State and Federal regulations, including Title 33, Part IX Chapter 9 of the Louisiana Administrative Code (LAC 33:IX.Chapter 9) and 40 CFR 112. The State Spill Prevention and Control (SPC) regulation establishes requirements for contingency planning and implementation of operating procedures, and best management practices to prevent and control the discharge of pollutants resulting from spill events. The Federal SPCC regulation establishes operating procedures, best management practices, equipment, and other requirements to prevent the discharge of oil from non-transportation-related onshore and offshore facilities. The combined SPC-SPCC Plan must be reviewed at least every five years and was most recently revised in July 2021. Brame Energy Center responded to 0 reportable oil spills in 2023.

The Facility Response Plan (FRP) regulation (40 CFR 112.20) applies to those facilities that may reasonably be expected to cause substantial harm to the environment by discharging oil. The FRP for the Brame Energy Center addresses 40 CFR 112.20.f.1.ii (i.e., those facilities whose total oil storage capacity is greater than or equal to 1 million gallons). LPPA has no ownership interest in, nor liability for, the fuel oil storage tanks on the Brame Energy Center site.

4.2.5 Retired Sites of Bonin and Rodemacher

The Bonin site is retired from electric generation and is the location of the LUS operations center. The Bonin plant still has the existing switchyard and gas transmission line to the site. LUS is planning to use the Bonin site for a new future gas-fired generation plant to be named Bonin 4. Curtis Rodemacher was retired in 1993 and ongoing site monitoring includes periodic inspections, with asbestos abatement and lead paint removal, as required.

4.2.5.1 Environmental Compliance

The Acid Rain and Title V permits for the Doc Bonin facility were withdrawn in February 2017. The facility had three EGUs. Unit 1 last operated on June 22, 2011, and was put into cold storage on June 1, 2013. Unit 2 last operated on July 5, 2013, and was put into cold storage on June 29, 2014; Unit 3 last operated on August 27, 2013, and was put into cold storage on June 29, 2014. When Bonin was put into cold storage, the CSAPR allowances were transferred to Labbé and Hargis-Hebert. Then the EPA recalled Bonin’s CSAPR 2021 – 2024 NOx allowances when it implemented Group 3 of the CSAPR NOx Ozone season. However, since Bonin’s account was empty, LUS had to re-transfer allowances back to Bonin. These allowances were transferred before the July 13, 2021, deadline and LUS met the Group 2 recall requirement. In 2016, MISO agreed to the retirement of Bonin since Units 2 and 3 were not needed for reliability.

LUS submitted a Request for Termination of its LPDES Permit (No. LA0005711), which authorized the discharge of operational wastewater and storm water from the Doc Bonin facility, on May 5, 2019. In response, LDEQ issued a letter on August 16, 2019, stating that the LPDES Permit had been allowed to expire, and the permit number was removed from the LDEQ system. Prior to LPDES Permit termination, LUS applied for permit authorization under LDEQ’s Storm Water Multi-Sector General Permit (“MSGP”) for continued coverage of storm water discharged from the Doc Bonin site. The MSGP (No. LAR05Q054) was authorized on April 24, 2019, and reissued on October 27, 2021.

The Doc Bonin site is no longer required to adhere to regulated materials storage and spill response requirements from the EPA and LDEQ, as fuel oil tanks and other regulated materials storage vessels have been removed from the site. Contaminated soil from historic fuel oil storage has also been removed.

On December 21, 2017, EPA published approval of the Louisiana State Implementation Plan for Regional Haze in the Federal Register. The effective date of the SIP was January 22, 2018. The Plan’s requirements for Rodemacher 2 have been complied with by using the existing enhanced DSI (SO_2 controls), electrostatic precipitator (PM controls), and fabric filter baghouse (PM controls). This control equipment offer the necessary controls for SO_2 and PM_{10} BART for the Rodemacher 2 boiler. Emission limits consistent with these control devices were estasblished in the unnumbered AOC that the LDEQ and Cleco entered into for the Brame Energy Center to make enforceable limits for regional haze purposes. The AOC has also allowed compliance with the established SO_2 and PM_{10} emission limits by conversion of the Rodemacher 2 boiler to natural gas only, unit retirement or another means of achieving compliance with the emission limits. In 2020, LDEQ began addressing writing a SIP for the second planning period. LDEQ did not request information pertaining to Rodemacher II in its analysis to determine which sources should evaluate reasonable progress controls.The second phase regional haze SIP was put out for public comment on April 20, 2021.

4.2.6 Hydroelectric Purchased Power

LUS has a PPA in place with the Southwestern Power Administration ("SWPA"). The power purchase agreement provides LUS with 22,320 MWh of energy supply from hydroelectric power generation. The power purchase agreement is through May 31, 2033. As one of four Power Marketing Administrations in the United States, Southwestern markets hydroelectric power in Arkansas, Kansas, Louisiana, Missouri, Oklahoma, and Texas from 24 U.S. Army Corps of Engineers multipurpose dams.[2]

4.2.7 Power Purchase Agreements

LUS did not have any other power purchase agreements other than hydroelectric agreement described previously in FY 2023. LUS has been working to secure new utility scale solar energy over the past two years. Pricing has increased considerably both in the U.S. and for the solar project under development. LUS recently issued a new RFP for solar due to the contract negotiation delays and project pricing concerns. Prices were not in alignment with LUS budgets for energy costs. LUS will continue to monitor the market and evaluate future potential options for utility scale solar energy.

4.2.8 Capacity Contracts

As a MISO participant, LUS is required to procure sufficient capacity to meet its load requirements. This capacity can be procured through owned resources or power purchase contracts. To meet its resource adequacy (i.e., capacity) requirements, LUS has been purchasing short-term capacity contracts through TEA. For MISO Planning year 2023-2024, MISO moved to a seasonal construct for capacity which requires resource adequacy for each season. LUS purchased 123 MW for the Summer (41 MW each month for June-August) and 105 MW for Fall (35 MW each month for September – November).

[2] https://www.JLWPa.gov/

4.3 Transmission and Distribution

The LUS electric system consists of approximately 49 miles of transmission lines (69 kV and above), 1,050 miles of distribution lines (13.8 kV) and a few hundred miles of secondary and street light lines (600V and below). The transmission and distribution lines are connected by 15 substations which are further described in the following sections.

4.3.1 Transmission System Description

The transmission lines operate at three voltage classes: 230 kV, 138 kV, and 69 kV, on a variety of structure types and configurations, but most commonly steel or wood mono poles, with the former being the most common new construction practice. The 230 kV feeds the Pont Des Mouton, Mall, Flanders, Beadle, and Elks distribution substations. It also connects the generation at T.J. Labbe Plant and ties to Cleco (at Pont Des Mouton and T.J. Labbe Plant substations), and Entergy (at T.J. Labbe Plant substations). The 138 kV is limited to at or near Doc Bonin Plant and Flanders substations and serves primarily to create additional ties to Cleco, at Flanders substation, and Entergy, at Doc Bonin Plant substation. 69 kV is LUS's most common transmission voltage, as it serves the Warehouse, Luke, St George, Gilman, Peck, Guilbeau, Perard, Sewer, Pinhook, La Neuville, and Elks substations as well as the Hargis-Hebert Plant.

4.3.2 Substations Description

LUS's typical substation configuration includes a single bus, looped transmission configuration with provisions for up to two 69/13.8 kV or 230/13.8 kV transformers, each serving up to four 13.8 kV circuits, normally configured. Both the transmission system and distribution circuits are typically protected by breakers within each substation. All substations other than La Neuville have two transformers. The LUS system has a total of 86 distribution circuits as of October 31, 2022.

4.3.3 Distribution System Description

The 1,050 miles of distribution lines include approximately 486 miles of overhead and 564 miles of underground primary. The overhead lines are typically constructed with single wood pole (creosote-treated, yellow pine) construction, 336 aluminum-conductor steel-reinforced cable ("ACSR") or similar backbone conductor, and normally open ties to other, neighboring circuits. The underground distribution lines (primary and secondary) consist of jacketed cable in polyvinyl chloride ("PVC") conduit.

4.3.4 Inspections & Maintenance

LUS has several cyclical inspection programs, focused on specific types/categories of equipment, as a part of its proactive maintenance practices. Table 4-18 outlines key transmission, substation, and distribution inspection and maintenance programs and their associated cycle durations.

Table 4-18: Maintenance and Inspection Programs

Asset Class	Program	Cycle (years)
Transmission	Pole inspections*	8
	Breaker maintenance	5
	Tree trimming / vegetation management (69 kV)	1+
	Tree trimming / vegetation management (230 kV)	1
Substation	General maintenance (transformers)	5
	Relay maintenance (microprocessor)	5
	LTC maintenance (transformers)	3
	Relay maintenance (electromechanical)	2
	Oil testing / sampling (transformers)	1
Distribution	Pole inspections*	8
	Major underground equipment inspection	8
	Tree trimming / vegetation management	4
	Capacitor testing	1
	Cable partial discharge testing	as needed

*Includes grounding/ohm testing

LUS's inspection and maintenance cycles are consistent with industry and regional best practices. Generally, maintenance work is performed by LUS crews, promoting system awareness and knowledge while new construction work is typically performed by contract crews. Much of the inspection work is executed by contractors as well, such as Osmose for pole inspections and Doble for transformer testing.

4.3.5 System Planning and Studies

LUS Staff perform annual planning assessments on both the transmission and distribution systems to assess system capacity, adequacy, and reliability.

4.3.5.1 Transmission Planning Studies

The transmission assessments are completed in accordance with applicable NERC standards such as NERC TPL-001-4 and in collaboration with MISO staff. The results of the 2023 NERC TPL-001-4 assessments found that the LUS transmission system either met the performance criteria specified in the TPL Standards with no mitigation required, or there existed adequate mitigation plans to bring the LUS system performance to meet or exceed the level specified by the TPL Standards. The short circuit component of the assessment found that (4) LUS non-BES breakers did not have adequate interrupting capability. These breakers have been recommended to be replaced. The report provides additional analyses and findings however the contents are classified as Critical Energy Infrastructure Information

(CEII) and therefore they are not fully described within the Consulting Engineers Report.

4.3.5.2 Distribution Planning Studies & Practices

LUS utilizes a model export process from its Environmental Systems Research Institute (“ESRI”) geographic information system (“GIS”) to the Easton CYME Power Engineering Software to facilitate load flow, short circuit, and protection coordination studies on its distribution system. Its distribution planners regularly update these models with current system topology and load levels to test system adequacy, reliability and to scope system improvement projects. LUS performs a robust annual contingency analysis to verify the system capability to serve N-1 contingency scenarios of:

- Loss of a substation transformer
- Loss of a distribution feeder
- Loss of a distribution substation

In the event of these contingencies, the system must allow for operator or crew reconfiguration while maintaining equipment operating limits and power quality limits. This practice is well aligned with LUS expectations for system reliability, availability, and operability.

4.3.6 Maintenance & System Improvement Projects

In 2023, as a part of cyclical inspections and maintenance, LUS replaced 69 distribution poles that failed Osmose inspections in FY 2023 and replaced breakers and relays throughout the system as described below. To improve operations, safety, and reliability, LUS completed the following projects in FY 2023:

- Added reclosures to multiple transmission lines and distribution circuits.
- Replaced 11 beakers at substations.
- Replaced 16 relays at substations.
- Deployed Tripsavers to replace fused taps in areas to improve reliability.
- Tested and repaired 109 transformers.
- Completed other miscellaneous SCADA and relay upgrades throughout the system to improve performance.
- Completed numerous overhead and underground line replacements and reconductoring projects.
- Completed numerous new overhead and underground line extensions projects to support growth.
- Inspected and repaired multiple transmission structures throughout the system.

LUS maintains little to no backlog of inspection and maintenance related replacements and prioritizes these projects as they occur.

4.3.7 Planned Maintenance & System Improvement Projects

The following major projects, which are included in the five-year CIP, are planned to serve new load, continue ongoing maintenance, or target worst performing feeders:

- Moss substation project which includes a new substation and two new transmission lines
- Northeast Substation project
- Peck Substation improvements
- Perard Substation Reconfiguration
- Mobile Substation project
- Bonin Switchyard Expansion
- Substation transformer replacements
- Replace aged wooden 230 kV structures from Beadle to Elk with monopole steel structures.
- Replacement of aged primary cable
- New distribution line extensions
- Distribution automation
- Reconductoring feeder 3050 getaway and feeder to increase its load capacity.
- The continuation of feeder relaying upgrades.

4.3.8 Operations and Related Performance

The dispatch and operations groups were fully staffed in 2023, and up to date with required training for compliance with the NERC standards. LUS has certified internal staff facilitating NERC compliance and certification for the group.

4.3.8.1 OMS Upgrades

In 2021, LUS began upgrading its Outage Management System (“OMS”), by Open Systems International, Inc. (“OSI”). The previous systems were aging and restricting the responsiveness and coordination between the dispatch and operations groups. The new OMS increases the speed and efficiency of operations and dispatch functions, enables better reporting for management and stakeholder awareness, and results in an expanded and combined dispatch group. The new OMS project was completed in FY 2022 and has been operational for over a year.

4.3.9 Reliability

In FY 2023, LUS did not experience any major weather events. Excluding the major event days, which is the prevailing industry practice for comparisons between utilities, the LUS system consistently outperforms regional and national averages for system reliability and availability, reflecting its established, intentional, and proactive maintenance, planning, and construction practices. Table 4-19 details the annual reliability performance of the LUS system over the last five years, for each of the four major reporting categories (System Average Interruption Duration Index (“SAIDI”), System Average Interruption Frequency Index (“SAIFI”), Customer Average Interruption Duration Index (“CAIDI”), and Momentary Average Interruption Frequency Index (“MAIFI”)). The table includes national and regional municipal utility averages for reference.

Table 4-19: LUS Electric System Reliability Metrics

Year	SAIDI	SAIFI	CAIDI	MAIFI
2019	39.7	0.74	53.6	0.57
2020	26.6	0.65	40.8	0.70
2021	21.2	0.66	32.4	0.29
2022	24.9	0.80	31.1	0.24
2023	41.7	0.62	67.7	0.12
National Median (1)	42.3	0.69	71.3	N/A
Regional Average (2)	93.6	1.17	62.9	N/A

1. Averages for 2018 triennial, American Public Power Association “Evaluation of Data Submitted in APPA’s 2018 Distribution System Reliability and Operations Survey”, Michael Hyland Alex Hofmann, Tyler Doyle and Ji Yoon Lee, July 2019.
2. APPA Region 4 (OK, AR, TX, LA) results for 2018 survey, American Public Power Association “Evaluation of Data Submitted in APPA’s 2018 Distribution System Reliability and Operations Survey”.

LUS has several initiatives that support a continued focus on system reliability. Related to the upgrades described in Section 4.3.8.1, System Operations has plans to further utilize its Outage Monitoring System (“OMS”) and enable its operators by allowing manual operator control of feeder reclosers for contingency switching. Longer term these operations will be automatically executed quickly and without operator intervention. These advances and continued expansion of communicating faulted circuit indicators (“FCI”) and capacitor banks will enable near-term Advanced Distribution Management System (“ADMS”) capabilities. LUS annually targets the top five worst performing feeders for detailed analysis and investment to improve reliability.

4.3.10 System Security

A detailed evaluation of the Utilities System security measures is beyond the intent of this Report. However, LUS facilities have physical security in place such as fencing, automatic gates, security checkpoints, keypads, etc. LUS security practices include employee and contractor background checks, routine training, and standard entry procedures for all electric facilities. There were no major modifications to the physical security systems in FY 2023.

4.4 Historical Capital Improvement Program

LUS uses a capital work order system to track capital expenses. The historical capital presented in Table 4-20 reflects investment in infrastructure funded by the Series 2019 Bonds and retained earnings. The Series 2019 Bonds and new Series 2023 Bonds issued November 15, 2023 are available to support various capital projects including fuel supply improvements, chiller coil replacement, breaker replacements, substation improvements, switchyard improvements, and street lighting upgrades.

Table 4-20: Electric System Historical CIP

	2019	2020	2021	2022	2023
Normal Capital & Special Equipment	$3,468,467	$7,142,480	$7,425,039	$7,671,062	$9,908,717
Series 2019 Bonds	241,628	3,123,162	3,904,433	8,208,536	8,828,651
Retained Earnings	4,331,810	4,026,770	4,234,336	8,008,371	7,226,686
Total Electric Capital	$8,041,906	$14,292,412	$15,563,809	$23,887,969	$25,964,054

Source: LUS Financial and Operating Statements and Utilities Status of Work Orders Report

4.5 Regulatory Compliance

The North America Electric Reliability Corporation (NERC) is a regulatory authority whose mission is to assure the reliability and security of the grid in North America. NERC develops and enforces reliability and security standards of the bulk power system. NERC is the Electric Reliability Organization (ERO) for North America, subject to oversight by the Federal Energy Regulatory Commission (FERC). In pursuant to Section 2015 of the Federal Power Act, NERC has delegated authority to six regional entities across North America with the responsibilities for reliability and security of the electric grid. In the southeast and central region of the United States the Regional Entity is SERC Reliability Corporation (SERC). SERC was assigned as LUS's regional compliance enforcement authority as of December 2, 2017. Prior to SERC, Southwest Power Pool was LUS's Regional Entity. The reliability standards are enforceable requirements that fall into one of fourteen categories. Depending on an entity, the assigned registration will often determine which standards are applicable to their facility. Standards are audited by the regional entity to ensure compliance.

LUS, also known as LAFA, remains registered with NERC as a Balancing Authority, Transmission Operator, Transmission Owner, Transmission Planner, Generator Operator, Generator Owner and Distribution Provider. LAFA has delegation agreements with MISO through Coordinated Functional Registration or Joint Registration Organizations Agreement. LAFA has a formal program for internal compliance, supported by management.

The formation of LAFA's NERC Compliance Section under the Engineering Department was established to meet the continuing evolution of in-scope regulatory standards and to provide oversight and assistance to Subject Matter Experts. LAFA's NERC Compliance consists of a full-time NERC Analyst, and Electric Reliability & Environmental Compliance Administrator, and several Subject Matter Experts within various departments.

Lafayette Utilities System will undergo two separate audits every three years. The Critical Infrastructure Protection (NERC CIP) Audit and an Operation and Planning (O&P) 693 Compliance Audit. The NERC CIP Standards consists of standards and requirements covering the security of electronic perimeters and the protection of critical cyber assets, as well as personnel and training, security management, and disaster recovery planning. The Electric System's most recent NERC CIP audit was performed on November 29 through December 1, 2022,-with zero areas of concern or recommendations. SERC Reliability Corporation conducted an Operations and Planning off-site audit from May 18, 2020, through September 10, 2020, in which there were zero areas of concern and recommendations. SERC also conducted a recertification review of LUS as a balancing authority and transmission operator due to the installation of a new EMS beginning on July 10. A virtual onsite was conducted by SERC on December 1 through December 2, 2020. NERC confirmed the certification of BA and TOP on January 12, 2021, by the certification review team and determined that LUS does not require a new certification. LUS is in compliance with all applicable NERC CIP and Operations and Planning ("O&P") 693 standards.

4.6 Contracts and Agreements

LUS maintains many contracts and agreements important to its day-to-day utility operations. Among the day-to-day operations contracts are agreements relating to maintenance of key equipment, testing services, customer acquisitions, and certain analysis functions. Table 4-21 provides a summary of the key contracts that are in place for LPPA and LCG.

Table 4-21: Electric System LPPA and LCG Key Contracts and Agreements

Contracts & Agreements Between	Date Signed/Renewed	Termination Date	Provisions
LPPA Contracts			
LPPA – Cleco, LEPA	November 15, 1982	June 30, 2032 or end of useful life	Joint ownership of Rodemacher Unit 2
LCG – LPPA	May 1, 1997	August 31, 2047 or when bonds were paid	Purchase of power from LPPA's 50 percent share in Rodemacher Unit 2
LPPA – Peabody	November 7, 2007	60 days' written notice	Purchase of coal for Rodemacher Unit 2
LPPA – Arch Coal Sales, Inc.	August 4, 2009	Upon 30 days' notice	Purchase of coal for Rodemacher Unit 2
LPPA - Navajo Transitional Energy Company, LLC	December 11, 2002	Upon 180 days' notice	Purchase of coal for Rodemacher Unit 2
LPPA - Coal Network, LLC	November 11, 2021	60 days' written notice	Purchase of coal for Rodemacher Unit 2
LPPA – Cleco – LEPA – Charah Inc	March 1, 2015	February 29, 2020; may be renewed for 1- or 5-year period	Sale of byproducts (ash) for reuse
MISO Related Contracts			
LCG – Other Transmission	January 4, 2013	Coincides with MISO Owners Agreement	Supplemental Agreement between Transmission Facilities Owners and MISO regarding Independent System Operator (ISO) services and functions
LCG – Other Transmission Facilities Owners	February 4, 2013	30 years from the earliest Effective Date for any signatory, therafter 5-year terms	Transmission Owner Agreement for LUS in MISO
LCG – MISO	February 4, 2013	Coincides with MISO Owners Agreement	Agency Agreement for Open Access Transmission Service
LCG – MISO	August 1, 2013	Upon 30-day notice	Agreement to procure satellite phone link
LCG – MISO	September 25, 2013	2 years from Effective Date, thereafter 1-year terms	Modeling, Data, and Analysis reliability standards compliance obligations primarily related to NERC requirements
LCG – Other Transmission Facilities Owners	December 10, 2013	5 years from Effective Date, thereafter 1-year term	Settlement Agreement between Transmission Owners and MISO on Filing Rights
LCG – Midwest ISO Transmission Owners	January 25, 2018	Withdrawal from MISO	Cost sharing for attorneys and consultants related to MISO.
LCG – MISO Interconnection Request	October 21, 2022	Withdrawal from MISO	Agreement to interconnect Doc Bonin 69kV.
TEA and Fuel Contracts			
LCG – TEA	June 1, 2013	Upon 6-months' notice, but not prior to 48 months after the Effective Date	Power and Fuel Marketing
TEA – Centerpointe	March 28, 2019	June 30, 2021 that is renewed annually till terminated by the party.	Supply of natural gas for Hargis Hébert Plant
TEA – Centerpointe	July 15, 2019	June 30, 2020 with 2 year extension option	Supply of natural gas for T. J. Labbé Plant and Doc Bonin Plant sites
Capacity, Energy and Renewable Contracts			
LCG – SPA	June 1, 2018	May 31, 2033	Purchase of hydroelectric power
LCG - TEA	June 1, 2023	August 31, 2023	41 MW of capacity from June 2023 – August 2023
LCG - TEA	September 1, 2023	November 30, 2023	35 MW of capacity from September 2023 - November 2023
LCG - TEA	June 1, 2024	August 31, 2024	25 MW of capacity from June 2024– August 2024
LCG - TEA	September 1, 2024	November 30, 2024	50MW of capacity from September 2024 - November 2024
Transmission Related Contracts			
City – Louisiana Generating (Cajun Electric)	May 23, 1983	Upon 3-year notice	Interchange agreement for electric transmission
City – Entergy Louisiana	October 6, 1988	Upon 18-month notice	Interchange agreement for electric transmission
LCG – Entergy Gulf States	June 22, 2012	June 21, 2032; year to year thereafter	Interconnection agreement for delivery of power
Miscellaneous Contracts			
LCG – SLEMCO	September 10, 2004	September 10, 2019	Contract expired. Negotiations ongoing.
LCG – TransCanada	January 18, 2019	January 18, 2024	CTG Maintenance Services.
LCG – City of Broussard	December 18, 2015	December 17, 2038	Franchise Agreement
LCG – City of Broussard	December 18, 2015	December 17, 2038	Streetlighting Agreement
LCG – City of Youngsville	July 7, 2017	November 30, 2026	Franchise Agreement
LCG – City of Youngsville	July 7, 2017	November 30, 2026	Streetlighting Agreement
LCG – Stuller	July 27, 2021	July 27, 2023	Electric Service agreement extended for two years

Source: LUS, LPPA, LCG

4.7 Utility Benchmarking

LUS compares favorably with its regional and national peers when benchmarking electric rates and financial performance. The following sections benchmark LUS's electric rates and financial performance.

4.7.1 Utility Rates Benchmark

LUS's residential and commercial electric rates have consistently been among the lowest in the region and continued to follow that trend into FY 2023. The following tables compare the average residential and commercial electric rates in the region as of October 31, 2023. Table 4-22 presents LUS and its regional peers' average electric rate based on a usage of 1,000 kWh per month. Table 4-23 presents the LUS commercial rate benchmark based on S&P Global data through 2022. While the fuel portion of the rate changes on a monthly basis based on LUS's cost of fuel and purchased power, the non-fuel rates have not been adjusted since FY 2018. LUS's Residential and Commercial average rates will increase in FY 2024 due to the rate increase that took place on November 1, 2023.

Table 4-22: Electric System Residential Rate Comparison

Utility	Average Rate ($/kWh)
New Orleans – Cleco	$0.10765
New Orleans - Entergy	$0.10765
Shreveport – SWEPCO	$0.09789
New Iberia - Cleco	$0.11999
Alexandria	$0.12787
Baton Rouge – Entergy	$0.10718
Lake Charles – Entergy	$0.10718
LUS	$0.09882

Source: LUS

Table 4-23: Electric System Commercial Rate Comparison

Utility	Average Rate ($/kWh)
New Iberia – Cleco	$0.13931
Alexandria	$0.11506
Shreveport – SWEPCO	$0.11901
New Orleans – Entergy New Orleans	$0.11797
Baton Rouge – Entergy Louisiana	$0.11681
Lake Charles – Entergy Louisiana	$0.11681
LUS	$0.10643

Source: S&P Global Retail Average Retail Rate Summary for Louisiana

4.7.2 Financial and Operating Statistics Benchmark

LUS benchmarks itself against other national and regional municipal electric utilities. Table 4-24 presents selected financial and operational ratios for LUS's electric utility with other national and regional utilities. The data is based on APPA Financial and Operating Ratios of Public Power Utilities and the 2022 Data was published in January 2024. The APPA report contains data based on regions of the U.S. and the number of electric customers served by the utility. LUS was benchmarked against other Southwest regional utilities since Louisiana falls within the southwest region. The majority of LUS's operating ratios are within an acceptable range of both national and regional benchmarks. LUS's revenue per kWh is less than the benchmarks and decreased overall due to the drop in fuel prices in FY 2023. The financial ratios including debt to total assets, current ratio, times interest earned ratio ("TIER"), and DSC have all remained within an acceptable range. DSC increased in FY 2022 as interest expense declined due to the refunding of the Series 2012 Bonds with the Series 2021 Bonds. LUS's uncollectable accounts per revenue dollar has gradually increased over the last 4 years. The system load factor has always been lower than national and regional averages due to a higher proportionate share of Residential customers to commercial customers as expected.

Table 4-24: Benchmarked Electric Utility Operating Ratios

Statistic	U.S. 50,000 - 100,000 Customers National 2022	Southwest U.S. Regional 2022	LUS 2020	LUS 2021	LUS 2022	LUS 2023
Revenue per kWh – All Retail Customers	$0.114	$0.113	$0.085	$0.090	$0.112	$0.095
Debt to Total Assets	0.350	0.449	0.362	0.343	0.319	0.286
Operating Ratio (Electric specific)	0.827	0.865	0.673	0.718	0.742	0.676
Current Ratio	4.12	2.85	1.84	2.07	2.10	2.25
Times Interest Earned	2.86	2.86	7.34	7.31	12.00	14.80
Debt Service Coverage	3.26	3.94	3.15	2.97	3.67	4.12
Net Income per Revenue Dollar ($)	$0.0590	$0.0810	$0.0856	$0.0674	$0.0940	$0.1459
Uncollectible Accounts per Revenue Dollar ($)	$0.0009	$0.0025	$0.0048	$0.0059	$0.0079	$0.0117
Total O&M Expense per kWh Sold	$0.0900	$0.0830	$0.0584	$0.0659	$0.0848	$0.0667
System Load Factor	56.4%	58.7%	51.3%	50.4%	50.3%	48.1%

4.8 Historical Financial Performance

The LUS electric utility has maintained strong financial performance over the last five years. The electric utility is responsible for nearly 75 percent of the total LUS utility revenues, so strong performance is important for the overall financial health of LUS. The electric system has provided sufficient debt service coverage over the last five years for the Series 2010 Bonds, Series 2012 Bonds, Series 2017 Bonds, Series 2019 Bonds, and Series 2021 Bonds. The Series 2010 Bonds were fully redeemed as of November 1, 2020. The Series 2012 Bonds were fully repaid with funds from the Series 2021 Bonds in FY 2022. The historical operating revenues, expenses, and debt service coverage calculations are presented in Table 4-25. Operating revenues include interest income and miscellaneous income. Operating expenses do not include ILOT, normal capital spend and special equipment costs, and other miscellaneous expenses.

Table 4-25: Electric System Historical Debt Service Coverage

Year	Operating Revenues	Operating Expenses	Net Revenues Available for Debt Service	Debt Service	Debt Service Coverage Ratio
2019	$179,965,886	$119,400,682	$60,565,203	$16,615,466	3.6
2020	$166,467,519	$112,044,248	$54,423,272	$17,255,061	3.2
2021	$179,851,903	$129,086,775	$50,765,128	$17,101,771	3.0
2022	$226,464,201	$168,003,708	$58,460,493	$15,950,735	3.7
2023	$201,823,546	$136,451,675	$65,371,872	$15,869,653	4.1

Source: LUS Financial and Operating Statements

4.8.1 Rate Structures

LUS's electric utility rates include customer charges, demand charges, and energy charges like many other electric utilities. The electric rates are reviewed periodically with the most recent rate study completed in FY 2024. The rate classes include residential, commercial, industrial, schools and churches, a university special contract rate, street lighting rates, and private area lighting. The residential class and small commercial class rates do not currently have demand charges while the other classes do.

Each rate class includes a fuel charge rider which recovers the variable cost of fuel and purchased power from customers monthly. Schedule Fuel Charge (FC) protects LUS from financial risk of unforeseen and volatile fluctuations in the wholesale power market which LUS operates. All operating expenses associated with environmental compliance, fuel, and purchased power are included in the FC and passed directly to customers in their monthly bills. More specifically, the FC recovers the net cost of MISO market purchases and sales, wholesale transmission costs, LPPA fuel costs, LPPA rail car debt, LPPA MATS debt, LPPA MATS O&M, LPPA reagents, LUS power plant fuel costs, hydro purchased power costs, and TEA power marketing costs.

The current electric rates, which were based on the results of the rate study completed in FY 2016, are presented in Table 4-26. The base electric rates (i.e. non-FC rates) have not changed since FY 2018. LUS periodically performs rate studies so that rates continue to generate revenues that are sufficient to recover its operating expenses and pay its outstanding debt obligations. LUS recently completed a rate study in FY 2022 and new electric rates were implemented at the beginning of FY 2024. The overall rate increases to the base rates that were approved in FY 2022 are 3 percent in FY 2024 and 3 percent in FY 2025. Burns & McDonnell completed a rate study for LUS in early FY 2024. The rate study was adopted by the City and included 3.5 percent base rate revenue increases for FY 2026, FY 2027, and FY 2028.

Table 4-26: Electric System Rate Schedules

Rate Class	Serves	Effective Date	Customer Charge ($/month)	Demand Charge ($/kW-month)	Non-Fuel Energy Charge ($/kWh)
R-1	Residential	Nov-17	$8.00	$0.00	$0.04764
R-1-O	Residential Non-City	Nov-17	$8.80	$0.00	$0.05240
C-1	Small Commercial	Nov-17	$10.00	$0.00	$0.06176
C-2	Large Commercial	Nov-17	$50.00	$8.50	$0.02098
SC-1	Schools and Churches	Nov-17	$10.00	$0.00	$0.05220

Source: LUS Rate Tariffs for FY 2023

4.8.2 Revenue Analysis

As described in the rates section of this Report, LUS generates revenues from base rates and the FC rider. The FC is adjusted as required to recover LUS's fuel and purchased power cost as defined in the ordinances and described previously. Table 4-27 presents the historical base rate and FC revenue over the last five years. Base rate revenues have remained steady over the last five years except for FY 2023 that saw record high summer temperatures. The FC revenues have fluctuated with wholesale market prices and fuel costs along with increases in energy sales. In FY 2022, the wholesale power market prices increased considerably which increased the FC rate and FC revenues. FY 2023 saw fuel drop back down but is still considerably higher than FY 2019 through FY 2021. A modest increase in overall retail sales resulted in an increase in overall base rate revenues and FC revenues.

Table 4-27: Historical Base Rate and Fuel Charge Revenues

	2019	2020	2021	2022	2023
Revenues					
Retail Sales- Base Rate	$100,836,993	$97,878,860	$99,763,119	$100,740,765	$104,240,922
Retail Sales- Fuel Clause	73,101,002	65,117,850	76,344,759	121,702,909	90,956,868
Total	$173,937,995	$162,996,710	$176,107,877	$222,443,673	$195,197,790
Energy Sales					
Retail Sales (kWh)	2,004,309,990	1,917,039,526	1,959,363,937	1,981,781,987	2,047,184,843
Revenue per kWh					
Retail Sales- Base Rate	$0.0503	$0.0511	$0.0509	$0.0508	$0.0509
Retail Sales- Fuel Clause	$0.0365	$0.0340	$0.0390	$0.0614	$0.0444
Total	$0.0868	$0.0850	$0.0899	$0.1122	$0.0953

Source: LUS Financial and Operating Statements

4.8.3 Revenue Statistics

As described previously, LUS provides service through multiple rate schedules which are updated periodically. LUS has experienced customer growth between FY 2019 and FY 2023. The energy usage per customer has been steady over the last five years. Table 4-28 presents the historical base rate revenues and sales in total and per customer by classification.

Table 4-28: Historical Base Rate Revenue Statistics

	2019	2020	2021	2022	2023
Revenues (non Fuel)					
Residential	$44,867,081	$45,249,322	$46,119,410	$46,261,889	$48,707,316
Commercial	47,517,635	44,934,325	45,393,897	46,018,132	46,714,082
Schools & Churches	5,210,732	4,638,383	5,000,613	5,219,828	5,773,345
Other	3,241,545	3,056,830	3,249,199	3,240,916	3,046,179
Total	$100,836,993	$97,878,860	$99,763,119	$100,740,765	$104,240,922
Number of Customers					
Residential	56,769	57,412	58,109	58,774	59,209
Commercial	9,285	9,484	9,521	9,637	9,858
Schools & Churches	527	541	536	509	506
Other	1,915	1,926	1,931	1,945	1,948
Total	68,495	69,364	70,096	70,865	71,521
Revenue per Customer					
Residential	$790	$788	$794	$787	$823
Commercial	5,118	4,738	4,768	4,775	4,739
Schools & Churches	9,891	8,567	9,337	10,255	11,406
Other	1,692	1,587	1,683	1,666	1,564
Total ($/customer)	1,472	1,411	1,423	1,422	1,457
Sales (kWh)					
Residential	830,153,367	829,390,383	848,819,679	851,520,487	897,716,346
Commercial	988,791,647	917,385,965	927,340,664	943,256,588	954,412,024
Schools & Churches	126,428,653	111,587,567	120,588,372	124,637,412	137,486,847
Other	58,936,323	58,675,611	62,615,222	62,367,500	57,569,626
Total	2,004,309,990	1,917,039,526	1,959,363,937	1,981,781,987	2,047,184,843
Sales (kWh) per Customer					
Residential	14,623	14,446	14,607	14,488	15,162
Commercial	106,498	96,728	97,400	97,875	96,814
Schools & Churches	239,978	206,103	225,153	244,867	271,624
Other	30,771	30,460	32,433	32,060	29,552
Total	29,262	27,638	27,953	27,965	28,623
Revenue per kWh					
Residential	$0.0540	$0.0546	$0.0543	$0.0543	$0.0543
Commercial	0.0481	0.0490	0.0490	0.0488	0.0489
Schools & Churches	0.0412	0.0416	0.0415	0.0419	0.0420
Other	0.0550	0.0521	0.0519	0.0520	0.0529
Total	$0.0503	$0.0511	$0.0509	$0.0508	$0.0509

Source: LUS Financial and Operating Statements

4.8.4 Expense Analysis

LUS's electric utility incurs both variable and fixed operating expenses. Variable expenses generally fluctuate with how much power is generated, delivered, and used while fixed operating expenses do not. Variable operating expenses include fuel, LPPA fuel, and wholesale purchased power and sales. Fixed operating expenses that do not change with the amount of energy consumed include power production labor and maintenance, distribution labor and maintenance, customer service and sales expense, and administrative and general expenses. Table 4-29 presents the historical operating expenses for LUS's electric utility system. In FY 2022, the MISO wholesale market prices increased considerably which resulted in higher purchased power costs, higher generation fuel consumption and generation sales. In 2022, natural gas and MISO energy costs increased due to international conflicts in Europe which resulted in a tightening of natural gas supply globally which increased energy prices across the United States and for LUS. FY 2023 saw a decrease in fuel prices compared to FY 2022 but is still elevated compared to historical averages. Fixed production costs, other than some LPPA generation projects, have been relatively stable which has helped to keep rates low. Transmission costs saw a steep decline in FY 2022 and FY 2023 due to the expiration of major transmission contracts. A&G and distribution costs both increased primarily due to inflationary pressures similar to other utilities across the United States.

Table 4-29: Historical Fixed and Variable Expenses

Variable Expenses	2019	2020	2021	2022	2023
Fuel Cost - LUS	$2,369,957	$1,945,110	$6,515,336	$14,763,071	$5,249,553
Purchased Power Other	15,569,793	18,203,665	4,976,460	15,428,496	4,077,187
Purchased Power LPPA Fuel	27,808,739	19,288,183	27,019,447	35,240,650	30,202,223
Purchased Power MISO	46,658,114	32,103,265	74,496,875	121,965,100	73,230,146
Purchased Power MISO Sales	(32,525,010)	(15,696,107)	(45,782,212)	(77,278,285)	(35,901,112)
Production - Variable	$59,881,593	$55,844,116	$67,225,906	$110,119,032	$76,857,998
Fixed Expenses					
Production - Fixed	$24,491,422	$21,809,812	$28,027,921	$26,333,693	$28,935,803
Transmission	8,612,596	8,438,158	7,103,445	2,408,749	1,416,040
Distribution	11,837,879	10,990,219	11,109,141	11,906,957	12,189,029
Customer	2,690,275	2,742,846	3,406,175	4,363,821	3,584,758
A&G	11,886,918	12,219,098	12,214,185	12,871,455	13,468,046
Total Fixed	$59,519,089	$56,200,132	$61,860,869	$57,884,676	$59,593,677
Total Fixed & Variable	$119,400,682	$112,044,248	$129,086,775	$168,003,708	$136,451,675
Percent Variable	50%	50%	52%	66%	56%
Percent Fixed	50%	50%	48%	34%	44%

Source: LUS Financial and Operating Statements

4.8.5 Recovery of Costs

Fixed and variable costs are recovered through retail demand rates, energy rates, and customer charges billed to customers. Commercial and Residential customers are both billed customers charges to recover customer related fixed costs. Residential and Small Commercial customers are billed energy charges to recover both fixed costs and variable utility costs. Large commercial customers are billed demand charges to recover fixed demand costs and energy charges to recover energy related costs. Approximately 50 percent of LUS's costs are fixed, however only 15 percent of its revenues are recovered through fixed charges. Utilities across the U.S. are gradually moving towards rate structures that recover more from higher customer charges and demand charges. LUS is working towards modernizing its rate structure with the changes that were implemented in FY 2024 because of the recently completed rate study.

Additionally, LUS recently implemented a pilot time of use (TOU) rate offering which will be offered to customers who can shift their use to low-cost time periods and save on their bills.

4.9 Findings and Recommendations

Based on the analysis described herein, Burns & McDonnell provides the following observations:

- Based on visual inspection of facilities, records audit, and interviews of LUS staff, the LUS distribution and transmission system is in good condition, maintained properly and in accordance with industry practices.
- LUS is proactive and strategic in its cyclical inspection, maintenance, and replacement of equipment.
- The LUS transmission and distribution planning and construction practices are proactive and aligned with a focus on reliability, resiliency, and efficient operation of the system.
- The LUS distribution system consistently outperforms regional and national averages for system reliability and availability, which reflects its intentional and proactive maintenance, planning, and construction practices.
- LUS revenues were sufficient to meet all financial obligations including operating expenses, LUS and LPPA debt service, capital improvements, ILOT payments, and required reserves. LUS's system operating, expense, debt, revenue, and related ratios reflect a financially stable and healthy utility that is currently offering competitive, lower than market average rates.
- The first of the two approved 3 percent electric rate increases from the rate study completed in FY 2022 went into place effective November 1, 2023, and will begin to increase electric revenues in FY 2024. LUS completed a rate study update in early FY 2024 and the proposed rate plan was approved and adopted by the City Council on March 5, 2024. The rate increases will generate revenues that allow LUS to continue to maintain its financial performance and fund planned future operating and capital expenditures.
- The electric system revenue recovery structure, like most electric utilities, is misaligned with how costs are incurred. LUS recovers nearly 85 percent of its revenues through variable charges when approximately 50 percent of its costs are fixed. This creates a systemic problem when energy usage per customer is declining, but customer growth is increasing. The approved electric rates are gradually increasing the customer charge for Residential customers over the next few years to better recover fixed costs. Commercial customers will see increases in both the customer charge and monthly demand charge.
- LUS recently issued new bonds at the beginning of FY 2024 to support various electric, water, and wastewater projects. The bond funding is reasonable and appropriate to fund these projects and the

forecasted revenues represented in the continuing disclosure financial projections are expected to be able to fund the new debt service associated with the new bonds.

- The Utilities System CIP has been sufficient to sustain and improve the integrity and reliability of the system.
- LUS completed an IRP in FY 2020. The IRP had several power supply initiatives for LUS to consider which included the retirement of Rodemacher Unit 2 in 2028, the construction of a new LUS owned simple cycle gas turbine power plant at the existing Doc Bonin site in 2028, and the addition of utility scale solar which would be procured through power purchase agreements.
- LUS and the joint owners of Rodemacher Unit 2 have all agreed to retire the unit from service in 2027 and decomission the plant in 2028. Cleco, in collaboration with LUS and the other joint owners, has begun preparing a decommissioning plan for the plant. Costs for the decommissioning are included in the forecast.
- On March 5, 2024, LUS received approval to proceed forward with the construction of a new simple cycle gas turbine power plant at the Bonin Generating Station site. The project is estimated to cost up to $362 million and will be funded with new bonds in late 2024 and late 2026 totaling up to $400 million.
- LUS has been working to secure new utility scale solar energy over the past two years. Pricing has increased considerably both in the U.S. and for the solar project under development. LUS recently issued a new RFP for solar due to the contract negotiation delays and project pricing concerns. Prices were not in alignment with LUS budgets for energy costs. LUS will continue to monitor the market and evaluate future potential options for utility scale solar energy.
- LUS was experiencing some issues with Rodemacher Unit 2 coal delivery and supply due to market constraints in 2022 however that is no longer a concern and coal supply and inventory has been restored.
- LUS performed well in FY 2023 from a reliability standpoint. LUS's performance on the four reported indices is consistent or significantly better than typical national median performance reported by both regional and national benchmarks. LUS has performed well in NERC CIP audits, NERC 693 operational audits, and LDEQ environmental inspections.
- LUS continues to make upgrades across its transmission system and distribution system to improve resiliency and redundancy. Major capital projects include upgrades to the Peck Substation and a new transmission line between the Peck Substation and the Northeast Substation which will relieve loading on Pont Des Mouton and Peck stations as well as serve as another path for power to flow

from the 230kV system to the 69kV system adding resiliency and redundancy.

- LUS has continued to make upgrades to its distribution system to improve automation, replace aging infrastructure, expand service where needed, and improve reliability. LUS’s five-year CIP includes funding to continue this practice which will enable LUS to continue to have strong reliability indices.
- LUS completed the installation of a new outage management system (OMS) for the electric utility in 2022. In FY 2023, the OMS has improved reliability and resiliency of the distribution system and has enabled LUS to restore customer service more quickly during storms and various outages.
- The organizational structure and management of the Electric System engineering and operations areas appears to be strong based on initial observations, interviews, organizational structures, and manpower within each department.
- The recruitment and retention of quality resources has continued to be a challenge for all LUS departments and even more so over the past two years as labor market inflation has increased rapidly. The number of open positions as compared to budgeted staffing levels has continued to widen and LUS is having an increasingly difficult time attracting new staff to replace key personnel that are retiring. LUS has historically worked internally to develop quality resources through training programs to retain employees, across multiple departments, and specifically addressing electric lineman and customer service positions. The LUS management team has also worked with local schools to hire and retain strong talent that appreciates the benefits provided by a more stable municipal utility business when compared to the oil and gas business of the gulf coast however with a competitive labor market this is becoming more of a challenge. LUS should conduct an evaluation of utility employee pay scales, position roles and responsibilities, and market conditions to improve acquisition and retention of utility staff immediately.

5.0 WATER UTILITY SYSTEM

5.1 Water Utility Summary

LUS provides potable water supply, water treatment, transmission, and distribution of finished potable water. Raw water supply is obtained from the Chicot aquifer. Key water infrastructure includes four water treatment facilities, 19 ground water wells, elevated and ground treated-water storage, and 1,177 miles of distribution mains.

LUS performs all water metering and customer service. In 2023, LUS provided water service to 59,076 meters representing residential, commercial, industrial, and wholesale customers. Water System total sales increased by 4.7 percent in 2023; with retail water sales increasing 4.3 percent, while wholesale water sales increased 5.6 percent. Historical Water System volume sales are presented in Table 5-1.

Table 5-1: Historical Retail and Wholesale Sales Volumes

FY	Retail Sales (1,000 gallons)	Wholesale Sales (1,000 gallons)	Total Sales (1,000 gallons)
2019	5,148,605	2,171,928	7,320,533
2020	5,075,882	2,191,571	7,267,453
2021	5,063,766	2,322,023	7,385,789
2022	5,190,827	2,424,469	7,615,297
2023	5,411,907	2,561,153	7,973,060

Source: LUS Financial and Operating Statements

5.2 Water Supply Summary

Nineteen groundwater wells within the Chicot aquifer provide water supply to four water treatment facilities: Jim Love Water Treatment Plant (“JLWP”); North Water Treatment Plant (“NWP”); Commission Boulevard Water Treatment Plant (“Commission Boulevard”); and Gloria Switch Remote Site (“Gloria Switch”), as summarized in Table 5-2. The Chicot aquifer is the sole source of supply for LUS, and groundwater produced is generally of high quality and characterized by the USGS as having a “very hard” level of hardness. Treatment processes employed by LUS are discussed in Section 5.3.

Table 5-2: Summary of Well Capacity

Well No.	Capacity (MGD)	Well No.	Capacity (MGD)
Jim Love Water Treatment Plant		North Water Treatment Plant	
1	2.59	7	2.88
2	2.59	9	2.88
3	2.59	12	2.81
4	2.59	14	3.03
5	2.59	16	2.95
6	4.04	19	2.88
7	4.04	21	2.88
		22	2.88
Total Production Capacity	21.0	Total Production Capacity	23.2
Firm Production Capacity[1]	17.0	Firm Production Capacity[1]	20.2
Commission Boulevard Water Treatment Plant		Gloria Switch Remote Site	
23	1.44	24	1.44
25	2.16	26	2.31
Total Production Capacity	3.60	Total Production Capacity	3.75
Firm Production Capacity[1]	1.44	Firm Production Capacity[1]	1.44

[1] Firm capacity assumes the largest well is out of service.

5.2.1 Aquifer System

The Chicot aquifer system underlies approximately 9,950 square miles of southwestern Louisiana and provides approximately 800 million gallons per day ("MGD") of freshwater for municipal, commercial, industrial, and agricultural uses through approximately 2,300 groundwater wells. The 2021 Triennial Report (LDEQ, 2021) evaluated water quality samples in 16 wells within the Chicot aquifer (one of which is owned by LUS) from ten parishes between February 2020 and May 2020. Field and analytical sampling results indicate no EPA maximum contaminant levels ("MCLs") were exceeded and that the water produced from the Chicot aquifer is of good quality when considering short-term or long-term health risk guidelines. The data also show that the water produced from the Chicot aquifer is hard and exceeded secondary MCLs for pH, iron, and total dissolved solids ("TDS"). Secondary MCLs are not enforceable by the EPA and are aesthetic in nature. Treatment processes are employed by LUS to address several of these secondary MCLs as described in Section 5.3. The 2024 Triennial Report is not published at the time of this report.

EPA has designated the Chicot aquifer as a sole-sourced aquifer, meaning it supplies at least 50 percent of the drinking water for its service area and there are no reasonably available alternate supplies should the aquifer become contaminated[3]. Academic studies of the Chicot aquifer conducted within the past decade have sought to assess the outlook of future water availability in the region due to groundwater withdrawals that may be resulting in saltwater intrusion, water quality degradation, and land subsidence.[4,5] LUS is aware of this ongoing issue and intends to drill its future groundwater wells in the shallow zone of the Chicot aquifer where the risk of potential saltwater intrusion may be mitigated.

5.2.2 Groundwater Wells

LUS'wells are each equipped with a line shaft vertical turbine pump with a surface-mounted motor. LUS reported that an independent contractor inspects wells once per year and cleaning / rehabilitation is performed as required to maintain well pumping capacity. LUS takes a proactive approach to monitoring and maintaining their wells. Operators perform daily checks on every groundwater well in the LUS inventory and maintenance technicians visit each well one to two times per week.

5.3 Water Treatment and Production

Four facilities provide treatment and disinfection of raw groundwater prior to supplying the distribution system for public consumption. Treatment facility capacities and major processes are described in the following sections and summarized in Table 5-3.

Table 5-3: Water Treatment Processes and Capacity

Water Treatment Facility	Primary Treatment Processes	Treatment Capacity (MGD)
Jim Love Water Treatment Plant	Lime Softening Coagulation and Filtration Disinfection Stabilization	23.0
North Water Treatment Plant	Lime Softening Coagulation and Filtration Disinfection Stabilization	20.8
Commission Boulevard Water Treatment Plant	Biofiltration Iron and Manganese Removal Disinfection Stabilization	4.0
Gloria Switch Remote Site	Iron and Manganese Removal	3.8

[3]https://www.deq.louisiana.gov/assets/docs/Water/Triennial_reports/ASSET2018_2021Triennials/10ChicotAquiferSummary21FINAL.pdf
[4] https://www.lsu.edu/lwrri/research/chicot_aquifer.php
[5] https://data.usgs.gov/datacatalog/data/USGS:5f72420682cef8d183971838

Water Treatment Facility	Primary Treatment Processes	Treatment Capacity (MGD)
	Disinfection Stabilization	
Total Treatment Capacity		51.6
Highest Recorded Production		34.8

Source of data: LUS

Additionally, LUS publishes a 5-year capital improvement program that has projected improvements for the water treatment and production components of the water utility. These improvements include: water system master planning, modification and upgrades of old treatment units and buildings, SCADA monitoring updates for locations throughout the entire LUS system, pipe pigging or cleanout at the NWP to remove scale buildup in piping near the plant, adding an additional ground storage tank and improving pipe gallery at both the NWP and JLWP for additional redundancy, rehabilitation of the lime silos at the JLWP to match the recent rehab at the NWP, upgrades to the pipe gallery at the Gloria Switch Site to allow for simultaneous backwashing and filtration, new groundwater wells for the JLWP, Gloria Switch Site, and Commission Boulevard Plant, clarifier gear replacement at the NWP, and solid settling tank painting at the NWP and JLWP.

Table 5-4: Water Treatment and Production Projected CIP

	2024	2025	2026	2027	2028	Total
Water Treatment and Production Total	$830,000	$5,630,000	$4,880,000	$4,230,000	$1,730,000	$17,300,000

Source of data: LUS

5.3.1 Jim Love Water Treatment Plant (South Plant)

Groundwater produced by water supply wells (Well 1 through Well 7) is combined at the head of the JLWP located at 810 W. Broussard Road where raw water is softened, clarified, filtered, disinfected, and stabilized for the distribution system. The JLWP was built in the 1980s and in 1990 production capacity was expanded by addition of a third treatment unit (rated for approximately 8 MGD), additional filtration, and a second finished water clear well and high service pump station. In 2023, one of the largest wells serving the JLWP (Well 7) was out of service during the drought season and all other wells were having to operate at full capacity to meet demand. The current treatment capacity of 23 MGD exceeds the total well production dedicated to this facility by 2 MGD. Due to the deficit between treatment capacity and supply capacity, it is suggested that LUS consider adding new groundwater wells to augment the JLWP supply. A typical best practice is to have sufficient well capacity to meet the treatment capacity of the water treatment plant while also having N+1 redundancy in supply wells during maximum day demand. A new well to serve the Jim Love plant is included in the 5-year CIP with work beginning in 2026.

Each of the three (3) clarifiers receive hydrated lime and alum in the mixing zone. Settled effluent from the basins is gravity fed to one of the eight filters. Filtered water is temporarily stored in one of two hydraulically connected finished water clear wells (50-thousand-gallon and 225-thousand-gallon capacity) and is then pumped into the distribution system. Disinfection at the JLWP is provided by chlorine gas.

The chlorine gas system is supplied by pressurized 1-ton cylinders of chlorine gas. The system primarily operates under a vacuum condition as an engineered-safety provision in the event of a leak. The chemical supplier of chlorine gas also provides a service to safely contain leaking equipment when called for this service. However, there is no means to safely contain a chlorine gas leak in the event of a pressurized discharge. It is suggested that LUS further evaluate using containment vessels for active cylinders or a scrubber system.

Polyphosphate (sodium hexametaphosphate) is then added for sequestration of contaminants (i.e., stabilization) linked to aesthetic issues. It is suggested that LUS consider changing the phosphate chemical used to provide corrosion control in the distribution system. A pure (i.e., neat) orthophosphate product or a blend of at least 70 percent orthophosphate could provide benefit to corrosion control and sequestration.

Waste streams including clarifier blowdown, backwash, and filter-to-waste are temporarily stored in a backwash recycle tank where decant water is pumped back to the head of the treatment units. Settled solids are pumped from the backwash recycle tank to a settling tank for further thickening. Thickened treatment residuals are hauled and land-applied at local farmland. It was discovered that the lime product used at both the NWP and JLWP contained a high degree of grit, which was impacting performance of solids thickeners and lime feed equipment.

The lime systems were noted to not have the ability to feed chemical based on concentration set point and plant flow rate. The ability to feed lime at the appropriate concentration will aid in control of chemical cost and water quality sent out to the distribution system. Notably, control of calcium hardness and pH, which may result in scale deposits in the distribution system and treatment plant piping, could be improved. It is suggested that LUS evaluate rehabilitating or replacing the lime feed systems with new units that will give operators the ability to control the lime dose. LUS staff suggested that the coagulation chemical used (alum) may not be providing optimal particle removal. Performing jar testing with various coagulant chemicals, or combinations of chemicals, may result in other coagulant chemicals being identified for optimized treatment. Additionally, LUS should consider performing a technical evaluation of the water quality being sent to the distribution system with emphasis on finished water, corrosion indices (i.e., Langelier Saturation Index, in addition to others), lime feed, and coagulant chemical selection.

A new 1.25-M gallon ground storage tank and two (2) high service pumps will be installed on the site adjacent to the facility as a part of a new project.

Emergency power is provided to the site by a combination of diesel-powered pump motors, a stationary generator, and a portable generator. The stationary generator is not capable of providing full power loads to the site in an emergency outage, and the portable generator is only capable of providing power to some of the wells or high service pumps not connected to the stationary generator. Only Well 3 and Well 4 are connected to the main stationary generator. LUS could consider additional emergency power be added to the JLWP to meet the full power load requirement of the plant during an outage. LUS personnel indicated that two additional dedicated portable generators would be needed to provide backup power to all wells serving the JLWP. Additionally, LUS could consider adding portable generator(s) to provide backup power for the remaining two wells and other pumps.

5.3.2 North Water Treatment Plant

Groundwater produced by water supply wells (Well 7 through Well 22) is combined at the head of the NWP located at 200 N Buchanan Street in Lafayette where it is treated utilizing processes similar to the JLWP. The NWP was built in 1929 and expanded and/or improved several times since then. The current treatment capacity is 20.8 MGD compared to the 20.2 MGD firm capacity of the wells feeding raw water to this facility. In 2023, one of the largest wells serving the NWP (Well 16) was out of service during the drought season and the other wells were able to meet demand without issue. During the drought period, and while operating all wells at maximum capacity, the north part of the distribution system experienced more prevalent issues with low pressure. Due to the deficit between treatment capacity and supply capacity, it is suggested that LUS consider adding new groundwater wells to augment the NWP supply. A typical best practice is to have sufficient well capacity to meet the treatment capacity of the water treatment plant while also having N+1 redundancy in supply wells during maximum day demand. A new well to serve the NWP is not included in the 5-year CIP but LUS indicated that it may be considered for inclusion in the future.

Five (5) softening basins receive hydrated lime and alum in the mixing zone and settled effluent is gravity fed to the fifteen (15) filters. A project was completed in 2023 to replace air scour piping, anthracite, sand, and gravel for all of the filters at the NWP. The filter underdrains are determined to be in good condition according to the condition assessment completed by Leopold in 2023. Filtered water is temporarily stored in one of two (2) finished water clear wells or an on-site 3.0-M gallon ground storage tank and/or three (3) 300,000-gallon ground storage tanks and pumped into the distribution system. Disinfection at the NWP is also provided by chlorine gas. Treatment plant waste streams at the NWP are handled similarly to the JLWP and residuals are similarly land applied.

The lime systems were noted to not have the ability to feed chemical based on concentration set point and plant flow rate. The ability to feed lime at the appropriate concentration will aid in control of chemical cost and water quality sent out to the distribution system. Notably, control of calcium hardness and pH, which may result in scale deposits in the distribution system and treatment plant piping, could be improved. It is suggested that LUS evaluate rehabilitating or replacing the lime feed systems with new units that will give operators the ability to control the lime dose. LUS staff suggested that the coagulation chemical used (alum) may not be providing optimal particle removal. Performing jar testing with various coagulant chemicals, or combinations of chemicals, may result in outcomes suggesting other coagulant chemicals for optimized treatment. Additionally, LUS should consider performing a technical evaluation of the water quality being sent to the distribution system with emphasis on finished water, corrosion indices (i.e., Langelier Saturation Index, in addition to others), lime feed, and coagulant chemical selection.

The chlorine gas system is supplied by pressurized 1-ton cylinders of chlorine gas. The chlorination system primarily operates under a vacuum condition as an engineered-safety provision in the event of a leak. The chemical supplier of chlorine gas also provides a service to safely contain leaking equipment on an as-needed basis. However, there is no means to safely contain a chlorine gas leak in the event of a pressurized discharge. It is suggested that LUS further evaluate using containment vessels for active cylinders or a scrubber system.

Similar to the JLWP, polyphosphate (sodium hexametaphosphate) is added for sequestration of contaminants linked to aesthetic issues. It is suggested that LUS consider changing the phosphate chemical used to provide corrosion control in the distribution system. A pure (i.e., neat) orthophosphate product or a blend of at least 70 percent orthophosphate could provide benefit to corrosion control and sequestration.

Emergency power is provided by an on-site emergency diesel generator which is not capable of providing power for the full plant. In 2023, an additional power feed loop was added to the NWP to supply power from a total of three different substations to reduce the likelihood of a power outage. LUS could consider increasing the capacity of the backup generator to better manage potential power failures. Additionally, the wells that supply water to the NWP are not all on backup generators or diesel-powered motors. LUS personnel indicated that one additional dedicated portable generator would be needed to provide backup power to all wells serving the NWP. LUS could consider adding portable generator(s) to provide backup power for these well(s).

The 16-inch diameter finished water pipeline that conveys water out of the NWP to the distribution system presents a hydraulic bottleneck and limits LUS's ability to utilize the full production capacity of the plant. LUS personnel have noted that due to scale build-up within the pipes leaving the NWP there have been instances of line breakages and pressure issues. It is suggested that an identification and replacement program targeting service lines and main lines be implemented in this area.

5.3.3 Commission Boulevard Water Treatment Plant

Groundwater produced by water supply wells (Well 23 and Well 25) is disinfected with chlorine gas and dosed with polyphosphate (tetra potassium pyrophosphate) at the Commission Boulevard Water Treatment Plant (located 204 Commission Boulevard) prior to entering the distribution system. Groundwater pumped at this location contains elevated levels of ammonia which is treated and removed by a biological process. The conversion of this site into a biological active filtration plant was part of a expansion and upgrade completed in 2023. The improvements to the site as part of the project included biological filtration, Greensand filters (for removal of iron and manganese similar to the Gloria Switch Remote Site) and switching to chlorine gas rather than sodium hypochlorite for disinfection. As a redundancy to the existing biofilters to allow for removal and maintenance of units while providing additional treatment capacity, ion-exchange has been considered to be installed in the future. The current treatment capacity is 4.0 MGD compared to the 1.44 MGD firm capacity of the wells feeding raw water to this facility. Due to the deficit between treatment capacity and supply capacity, it is suggested that LUS consider adding new groundwater wells to augment the Gloria Switch supply. A typical best practice is to have sufficient well capacity to meet the treatment capacity of the water treatment plant while also having N+1 redundancy in supply wells during maximum day demand. A new well to serve the Commission Boulevard plant is included in the 5-year CIP with work beginning in 2025.

Similar to the JLWP and NWP, it is suggested that LUS consider changing the phosphate chemical used to provide corrosion control in the distribution system. A pure (i.e., neat) orthophosphate product or a blend of at least 70 percent orthophosphate could be considered.

A new 1.0-M gallon tank was installed in 2023 on the site for redundancy, which supplies water to the newly installed two high service pumps with 2,000 GPM capacity each. Variable frequency drives (VFDs) were added to the pumps to regulate the water pressure between 60 to 70 psi as demand fluctuates and the tank level changes. To better manage potential power failure, a new generator was installed to provide the full plant power demand.

5.3.4 Gloria Switch Remote Site

Groundwater produced by water supply wells (Well 24 and Well 26) is treated and disinfected at the Gloria Switch Remote Site located at 1708 W Gloria Switch Road, Carencro, Louisiana. The current treatment capacity is 3.8 MGD compared to the 1.44 MGD firm capacity of the wells feeding raw water to this facility. Due to the deficit between treatment capacity and supply capacity, it is suggested that LUS consider adding a new groundwater well to augment the Gloria Switch supply. A typical best practice is to have sufficient well capacity to meet the treatment capacity of the water treatment plant while also having N+1 redundancy in supply wells during maximum day demand. A new well to serve the Gloria Switch Site is included in the 5-year CIP to with work beginning in 2027.

Groundwater is dosed with sodium hypochlorite and permanganate for oxidation upstream of Greensand filtration for iron and manganese removal. Polyphosphate (tetra potassium pyrophosphate) is added for sequestration of contaminants linked to aesthetic issues and additional sodium hypochlorite provides disinfection residual. Similar to the other sites, it is suggested that LUS consider changing the phosphate chemical used to provide corrosion control in the distribution system. A pure (i.e., neat) orthophosphate product or a blend of at least 70 percent orthophosphate could be considered.

A new project for improvements to the disinfection and treatment at Gloria Switch site is being considered by LUS. Currently, the six (6) Greensand filters must all be in-service to meet the treatment capacity of the Gloria Switch Remote Site, and there is no means to backwash and produce water simultaneously. The project would replace the existing Greensand media with Greensand Plus media and chlorine will be added as gas rather than sodium hypochlorite upstream of filters. These changes would allow LUS to discontinue feeding permanganate, and it is expected that the site will be able to simultaneously backwash filters and produce treated water.

A 0.75-M gallon ground storage tank is located on site adjacent to the facility and provides supply to the high service pump station. Emergency power is provided by an on-site emergency diesel generator capable of providing the full plant power demand as only one well runs through the filters at a time currently. However, with the installation of new filter media and future expansion, the site will be able to run both the wells through the filters and LUS should consider adding backup generator power to provide emergency power to both wells. The project to replace media and controls for the site will also allow for simultaneous backwashing and filtration of the filter lineup.

The six (6) Greensand filters must all be in-service to meet the treatment capacity of the Gloria Switch Remote Site. The new filter media will allow for the filters to be re-rated for higher treatment capacity and may provide the ability to have filters out of service while treating at the capacity of the supply wells.

5.4 Water Distribution and Storage

Water main materials primarily consist of ductile iron, polyethylene, PVC, asbestos cement, and cast iron. There are 212 sample stations located throughout the distribution system. Distribution system assets data including main lines, main line breaks, valves, and hydrants are summarized in Table 5-5.

Table 5-5: Water Distribution System Asset Summary

Asset	2019	2020	2021	2022	2023
Miles of Main Lines in Inventory	1,145	1,153	1,159	1,169	1,181
Miles of Main Lines Replaced	0.03	0.26	0.72	0.94	0
Number of Water Main Breaks	143	184	285	235	270
Number of Valves	23,755	24,112	24,361	24,746	25,150
Number of Hydrants	6,685	6,614	6,811	6,872	6,952

During 2023, approximately 1.6 miles of new water mains were installed in the City of Lafayette and 10.4 miles of new mains in the North Water District for a total of 12 miles of new water main added to the entire system. Over the period of 2019 to 2023, LUS renewed its water main assets at an annualized rate of less than 0.1% per year. Water main breaks trended upwards over the same period.

Water is stored in numerous ground storage or elevated storage tanks located at the treatment plant sites and throughout the distribution system, as summarized in Table 5-6.

Table 5-6: Water Storage Facilities

Location	Storage Type	Storage Volume (MG)
Treatment Facilities		
Jim Love Water Treatment Plant (South Plant)	Ground Storage – Concrete Clearwell	0.225
	Ground Storage – Concrete Clearwell	0.5
	Ground Storage – Steel Tank	2.0
	Total Storage	2.725
North Water Treatment Plant	Ground Storage – Concrete Tank	0.3
	Ground Storage – Concrete Tank	0.3
	Ground Storage – Concrete Tank	0.3
	Ground Storage – Steel Tank Ground Storage – Concrete Clearwell Ground Storage – Concrete Clearwell	3.0 0.025 0.35
	Total Storage	4.275
Commission Boulevard Plant	Ground Storage Concrete Tank	1.0
Gloria Switch Remote Site	Ground Storage – Concrete Tank	0.75
Distribution System		
Fabacher	Ground Storage – Concrete Tank	2.0
Bertrand	Elevated Multi-Column	0.3
Walker Road	Elevated Multi-Column	1.0
Guilbeau	Elevated Multi-Column	1.0
South Park	Elevated Composite	1.0
North Park	Elevated Composite	1.0
	Total Storage	6.3
	Total System Storage	15.05

Source of data: LUS

LUS staff indicated that additional ground storage is required at the JLWP and NWP. The existing 2.0-M gallon tank at the JLWP and the 3.0 M-gallon ground storage tank at the NWP, are operated 24 hours per day, so neither can be removed from service for repairs or maintenance to be performed. LUS is in the process of initiating a project to expand storage capacity at the JLWP, adding a new 1.25 MGD ground storage tank and two (2) high service pumps. These pumps will have maximum capacity of pumping 3,000 GPM at 190 ft head with VFDs to regulate the water pressure between 82 to 90 psi as demand fluctuates.

The 2.0-million gallon ground storage tank at the Fabacher location has an adjacent high service pump station with a sodium hypochlorite storage and dosing system. A 1,000-gallon sodium hypochlorite tank was replaced with a 100-gallon tank because boosting the chlorine residual at this location is rarely needed. LUS staff noted that the two 3.6 MGD single-speed high service pumps provide too much pressure, which could be alleviated with the addition of VFDs. Only three pumps in the entire water distribution inventory utilize VFDs as depicted by Table 5-7. Adding VFD's will improve operational flexibility, alleviate surge and over-pressurization of service mains, and may improve efficiency.

Table 5-7: High Service Pump Stations and Pump Types

Location	Pump No.	Flow @ Head	Pump Type
Jim Love Water Treatment Plant (South Plant)	1	3000 @ 190'	Vertical Turbine w/ VFD
	2	3000 @ 190'	Vertical Turbine
	3	3000 @ 190'	Vertical Turbine
	4	1000 @ 200'	Vertical Turbine
	5	Number Reserved for Future Pump	--
	6	3000 @ 190'	Vertical Turbine w/ VFD
	7	3000 @ 190'	Vertical Turbine
	8	3000 @ 190'	Vertical Turbine
	9	3000 @ 190'	Vertical Turbine
	10	Number Reserved for Future Pump	--
	11*	3000 @ 190'	Vertical Turbine w/ VFD
	12*	3000 @ 190'	Vertical Turbine w/ VFD
	TOTAL	**40.32 MGD**	
North Water Treatment Plant	1	2500 @ 180'	Vertical Turbine w/ VFD
	2	2500 @ 180'	Vertical Turbine
	3	2500 @ 180'	Vertical Turbine
	4	2200 @ 180'	Vertical Turbine
	5	1800 @ 180'	Vertical Turbine
	6	2000 @ 180'	Vertical Turbine
	7	2000 @ 180'	Vertical Turbine
	8	2000 @ 180'	Vertical Turbine
	9	3000 @ 180'	Vertical Turbine
	10	3000 @ 180'	Vertical Turbine
	12**	--	Vertical Turbine
	TOTAL	**34.42 MGD**	
Commission Boulevard Water Treatment Plant	1	2000 @ 196'	Vertical Turbine w/ VFD
	2	2000 @ 196'	Vertical Turbine w/ VFD

Location	Pump No.	Flow @ Head	Pump Type
	TOTAL	**5.76 MGD**	
Gloria Switch Remote Site	**1*****	1000 @ 190’	Vertical Turbine
	2***	1000 @ 190’	Vertical Turbine
	TOTAL	**2.88 MGD**	

Source of data: LUS
* Pump is expected to be commissioned in 2024
** Demolished in 1993
*** Head unconfirmed

Additionally, LUS published a 5-year capital improvement program for water distribution and storage components of the water utility system. These improvements include: general water main upgrades, replacements, extensions, and relocations (Louisiana Avenue between Maryview and Gloria Switch, Ambassador Caffery between Galbert and Bertrand, from the NWP to Evangeline Thruway, at the Tenth St and Laurel intersection, Sabatier Road, Louisiana Avenue from Butcher Switch to Gloria Switch Site, and General Gardner and North Washington), painting of the Vincent Road and Fabacher ground storage tanks, water meter modules, valve installations at the NWP, and general valve replacements throughout the distribution system.

Table 5-8: Water Distribution and Storage Projected CIP

	2024	2025	2026	2027	2028	Total
Water Distribution and Storage Total	$2,020,000	$7,670,000	$1,120,000	$1,720,000	$570,000	$13,100,000

Source of data: LUS

5.4.1 Water Metering

In late 2022, LUS experienced failures with its existing Advanced Metering Infrastructure (AMI) equipment. LUS’s AMI system is a smart metering system with communication gear, which was installed in 2012. The existing communications modules experienced failures and the manufacturer was unable to provide support for the units without full replacement. The module failures have resulted in LUS performing manual meter readings for approximately 10,000 water meters, some of which have not been communicating measurements for approximately two years. Due to the criticality of reliable metering, LUS is replacing all existing AMI with new modules from a different manufacturer with a replacement goal of 300 meters per week. At the time of this report, LUS has already changed out 33,000 modules at a cost of $6.6 million over the last two years. LUS has budgeted another $5 million to replace the remaining water meter modules over FY 2024 and FY 2025. The costs include both the meter module equipment and the contractor cost to replace the meter module.

5.4.2 Operations and Related Performance

Gross water production in 2023 was 9,356 million gallons ("MG") or an average of 25.6 MGD. Unaccounted for water is calculated by subtracting the total water sales from the total water distributed. This represents the volume of water lost in the distribution system. These losses can be attributed to physical losses (i.e., pipe or tank leakage) or non-physical losses (i.e., under-billed or un-billed volume). In 2023, unaccounted for water was 14.5 percent which is an increase from previous years. Unaccounted for water has increased over the past 5 years, but LUS reported that a more significant increase occurred over the previous five-year period of 2014 to 2019. In response to this trend, LUS engaged Water Company of America ("WCA") to aid in locating and identifying premises within the LUS distribution system where there may be issues with water billing, such as incorrect billing service agreements or conspicuous meter readings. The water loss investigations by WCA are focused only on the consumer-side of water meters and do not involve investigations in the LUS distribution system. Reports produced by WCA show a baseline revenue of a premise before and after correction of billing. Since 2022, WCA has not reported new water-loss events that may result in increased revenue for LUS.

Table 5-9: Production and Unaccounted for Volumes

Item	2019	2020	2021	2022	2023
Total Water Produced (1,000 Gal)	8,272,102	8,340,279	8,481,925	8,756,647	9,356,487
Plant Use (1,000 Gal)	31,200	31,200	31,200	31,200	31,200
Total Water Distributed (1,000 Gal)	8,240,902	8,309,079	8,450,725	8,725,447	9,325,287
Total Water Sales (1,000 Gal)	7,320,533	7,267,453	7,385,789	7,615,297	7,973,060
Not Accounted for (1,000 Gal)	920,369	1,041,626	1,064,936	1,110,150	1,352,227
Unaccounted for Water	11.2%	12.5%	12.6%	12.7%	14.5%

Distribution system hydrant testing occurs twice per year as required by the Property Insurance Association of Louisiana ("PIAL") and as necessary to maintain the utility's Class II PIAL fire rating. In previous reports, it was noted that distribution system flushing required to meet the Louisiana Department of Health and Hospitals Emergency Rule governing the minimum disinfectant residual of 0.5 mg/L chlorine in the distribution system was an attributing factor to the rise in unaccounted for water. The improvements at Commission Boulevard have resulted in reducing the frequency of maintenance flushing for water quality control.

5.4.2.1 System Pressure Issues in North Service Area

LUS staff have reported increasing frequency of pressure loss (i.e., less than 20 psi) in the north part of the LUS service area, despite proximity to the NWP high service pumps and the North Park Elevated Tower. As discussed in previous reports, the water mains leaving the NWP are likely subject to restricted flow due to calcium carbonate scale accumulation. LUS staff also noted the need for additional water supply to service the entire North Service Area. Additional water sources may be additional well(s), water storage capacity, booster pump stations, and additional or larger transmission mains. It is suggested that a system-pressure modeling study, with focus on the north service area, be performed. This may be included as part of any future water master plan efforts.

5.4.3 Severe Weather Events

Extreme weather conditions and events have been an increasing trend in recent years. Winter Storm Uri occurred in 2021, and another freezing event occurred in December 2022. The LUS water treatment facilities were able to continuously treat and produce water for customers in such events, but low pressures (i.e., lower than 20 psi) were observed in the distribution system and a boil notice was issued as a precaution for consumer safety. The pressure drop was largely attributed to distribution piping constraints and customers opening their faucets to avoid bursting pipes. There were no severe winter events in 2023 that impacted the ability to provide water at sufficient pressure.

In 2023, LUS experienced a drought event where there were ten weeks without precipitation and the heat index was above 120°F. As a result of the drought, LUS continued its annual customer outreach through social media and marketing channels but also identified and notified customers that were violating the existing ordinance from 2001 requiring water conservation by customers. During the drought LUS experienced a peak month demand in August of 30 MGD, an increase of 31% from the 23 MGD experienced in 2022. Water pressure issues were reported by residential, commercial, and wholesale water customers; however, LUS never lost the ability to treat and deliver water to customers. It is suggested that LUS perform a system pressure modeling effort as identified in Section 5.4.2.1 to evaluate options to improve pressure within the distribution system.

5.4.4 Hurricane Inspections

LUS was not directly impacted by any hurricanes in 2023 and therefore no hurricane inspections were performed.

5.5 Historical Capital Improvement Program

LUS tracks capital expenses through its capital work order system. Historical capital improvements program expenditures presented in Table 5-10 reflect investments in infrastructure funded by the Series 2019 Bonds and retained earnings. Major capital improvements in 2023 were centered around upgrades to the distribution system.

Table 5-10: Historical Capital Improvement Program

	2019	2020	2021	2022	2023
Normal Capital & Special Equipment	$ 1,526,170	$ 2,382,861	$ 2,601,696	$ 3,143,487	$ 3,659,609
Series 2019 Bonds	0	1,003,625	3,136,326	10,830,713	6,351,057
Retained Earnings	786,874	633,431	1,781,914	2,514,014	1,983,320
Total Water Capital	$ 2,313,045	$ 4,019,917	$ 7,519,937	$ 16,488,214	$ 11,993,987

Source of data: LUS Financial and Operating Statements and Utilities Status of Work Orders Report

5.5.1 ARPA Funding

In FY 2023, LUS was not awarded grants through the Louisiana Water Sector program from the American Rescue Plan Act (ARPA) for water improvements projects. However, LUS has previously been awarded ARPA grants and expects to receive $4.7 million for projects over the next 2 years.

5.6 Environmental and Regulatory Compliance

The following sections provide an overview of environmental and regulatory compliance associated with the water system. Environmental compliance for the water system is provided by LUS Environmental and Compliance staff including sample collection, analysis, and reporting.

5.6.1 Water Quality

The EPA requires water utilities to perform specific annual water quality sampling and summarize results in an annual Consumer Confidence Report which is then made available to the public[6]. The most recent Consumer Confidence Report available is for the 2022 calendar year. LUS expects to publish the 2023 Consumer Confidence Report in Summer of 2024. The 2022 water quality report indicates no MCL exceedances were observed in the 2022 calendar year. A Louisiana Drinking Water Watch search was performed and indicates there were no water system deficiencies found, as presented in Table 5-11.

[6] The 2022 Consumer Confidence Report can be found at https://www.lus.org/water-quality.

Table 5-11: Drinking Water System Violations

Type	Category	Analysis	Compliance Period
No violations occurred during this CER reporting period	NA	NA	NA

Source of data: LUS Water Quality Report 2022

Triennial lead and copper sampling was performed by LUS in 2019 and was not required in the 2020 or 2021 calendar year. For reference, the 2019 lead and copper sampling results are provided in Table 5-12. There are zero sites that reported lead or copper concentrations above EPA Designated Action Levels. Section 5.6.3 discusses recent revisions to the Lead and Copper Rule.

Table 5-12: Lead Sampling

Constituent	Major Source in Drinking Water	EPA Designated Action Level (requires treatment) at 90th Percentile	LUS Results at 90th Percentile Testing
Lead	Corrosion of household plumbing systems; Erosion of natural deposits	15 ppb	< RL – 2.0 ppb

Source of data: LUS Water Quality Report 2022
RL: Range Limit
ppb: Parts Per Billion

The EPA Stage 2 Disinfectants and Disinfection Byproducts Rule ("DBPRs") requires sampling of regulated contaminants including total trihalomethanes ("TTHM") and five haloacetic acids ("HAA5"). The LDH collects samples for TTHM and HAA5 at six points within the distribution system monitoring and these are analyzed by a third-party laboratory. Results of the DBPR sampling are summarized below. No TTHM or HAA5 samples exceeded the respective MCL or MCLG.

Table 5-13: Disinfection Byproducts Monitored in Distribution System

DBP	Typical Source	Maximum Contaminant Level (MCL)	Maximum Contaminant Level Goal (MCLG)	Locational Running Annual Average (LRAA)	Range	Location
Haloacetic Acids (HAA5)	By-product of drinking water chlorination	60 ppb	0 ppb	3 ppb	2.1 – 3.3 ppb	Ambassador Caffery & W. Congress
				4 ppb	2.0 – 4.1 ppb	Gloria Switch Rd. & Arbor
				4 ppb	2.9 – 4.9 ppb	Kaliste Saloom & E. Broussard

DBP	Typical Source	Maximum Contaminant Level (MCL)	Maximum Contaminant Level Goal (MCLG)	Locational Running Annual Average (LRAA)	Range	Location
				5 ppb	3.7 – 7.2 ppb	Thomas Nolan & Brigante
				3 ppb	2.2 – 3.2 ppb	Vennard & Valley View
				2 ppb	1.7 – 2.8 ppb	Walker & Doc Bonin
Total Trihalomethanes (TTHM)	By-product of drinking water chlorination	80 ppb	0 ppb	10 ppb	8.6 - 10.4 ppb	Ambassador Caffery & W. Congress
				10 ppb	8.8 – 11.1 ppb	Gloria Switch Rd. & Arbor
				12 ppb	8.7 - 19.4 ppb	Kaliste Saloom & E. Broussard
				18 ppb	11.2 – 25.4 ppb	Thomas Nolan & Brigante
				10 ppb	8.7 – 10.3 ppb	Vennard & Valley View
				7 ppb	6.1 - 8.1 ppb	Walker & Doc Bonin

Source of data: LUS Water Quality Report 2022
RL: Range Limit
ppb: Parts Per Billion

Each of LUS's treatment facilities uses chlorine gas as a disinfectant to control microbes within the distribution system, except for Gloria Switch Remote Site which currently uses sodium hypochlorite but will convert to chlorine gas after the conclusion of an improvements project. The minimum allowable free chlorine concentration in the distribution system, set by Louisiana Department of Health ("LDH"), is 0.5 ppm and the maximum residual disinfectant level ("MRDL") and maximum residual disinfectant level goal ("MRDLG") are both 4 ppm. A summary of chlorine in the distribution system is included in Table 5-14.

Table 5-14: Distribution System Disinfectant

Disinfectant	Typical Source	MRDL	MRDLG	Highest RRA	LUS Range
Chlorine	Water additive to control microbes	4 ppm	4 ppm	1.6 ppm	0.5-2.8 ppm

Source of data: LUS Water Quality Report 2022
RL: Range Limit

Drinking water in the distribution system is also sampled and analyzed for microbes. The results of the microbiological sampling are summarized in Table 5-15.

Table 5-15: Microbiologicals Monitored in Distribution System

Microbiologicals	Typical Source	Maximum Contaminant Level (MCL)	Maximum Contaminant Level Goal (MCLG)	Result
None Detected	NA	NA	NA	NA

Source of data: LUS Water Quality Report 2022
RL: Range Limit

Raw groundwater was also sampled and analyzed for barium, fluoride, combined radium (-226 and -228) and gross beta particle activity. The results of the sampling are summarized in Table 5-16.

Table 5-16: Constituents Monitored Before Treatment

Constituent	Major Source in Drinking Water	Maximum Contaminant Level (MCL)	Maximum Contaminant Level Goal (MCLG)	LUS Max	LUS Range
Arsenic	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes	10 ppb	0 ppb	1.6 ppb	<RL-1.6 ppb
Barium	Discharge of drilling wastes, discharge of metal refineries, erosion of natural deposits	2 ppm	2 ppm	0.26 ppm	<RL-0.26 ppm
Fluoride	Erosion of natural deposits; discharge from fertilizer and aluminum factories	4 ppm	4 ppm	0.2 ppm	0.2 ppm
Combined Radium (-226 & -228)	Erosion of natural deposits	5 pCi/L	0 pCi/L	1.6 pCi/L	<RL -1.6 pCi/L

Source of data: LUS Water Quality Report 2022
RL: Range Limit
ppm: Parts per Million

Every five years, the EPA updates the contaminants to be monitored by public water systems under the Unregulated Contaminant Monitoring Rule ("UCMR"). The final rule of UCMR5 was published December 27, 2021 and includes sampling and analysis for 29 per- and polyfluoroalkyl substances

("PFAS") and one metal: lithium. EPA anticipates UCMR5 sampling from 2023 to 2025, posting the first set of preliminary UCMR 5 results in mid-2023 and expects to update the results approximately quarterly thereafter. According to LUS, they will begin collecting UCMR5 samples by late 2024.

5.6.2 America's Water Infrastructure Act of 2018

The America's Water Infrastructure Act ("AWIA") of 2018, Section 2013 required that all water systems perform a Risk and Resilience Assessment ("RRA") and update the water system's Emergency Response Plan ("ERP"). LUS was required to certify completion of an RRA and ERP Update by March 31, 2020, and September 30, 2020, respectively. LUS reported that these services were performed by Neel Schaffer and that EPA certifications were submitted by LUS prior to the regulatory deadlines. These documents must be updated and submitted to EPA on a 5-year cycle. The next RRA and ERP update is due by March 31, 2025, and September 30, 2025, respectively. LUS has begun planning to complete these updates.

5.6.3 Lead and Copper Rule Requirements

The EPA issued the final Lead and Copper Rule Revisions ("LCRR") on January 15, 2021. The LCRR represents the first major update to the Lead and Copper Rule in 30 years and requires water utilities to prepare and maintain lead service line inventories, requires modifications to lead and copper sample locations and protocols, and, if triggered, perform, and implement corrosion control studies and/or lead service line replacement.

The EPA mandated the effective date of the LCRR to be December 16, 2021, requiring all systems with any LSLs to prepare and submit to its State regulatory agency the LSL inventory, along with an LSL Replacement Plan and publicly accessible inventory by October 16, 2024.

On November 30, 2023, EPA announced the proposed Lead and Copper Rule Improvements ("LCRI"), which included modifications to the LCRR requirements. The main focus of this update was the replacement of 100% of lead pipes in drinking water systems within 10 years of the promulgation of this legislation. This will also require that LUS identify any unknown materials on the system-side and customer-side of the water service.

According to the 2022 Water Quality Report, lead and copper has not been detected in LUS's source water and records do not indicate any lead and copper for 90th percentile values in the distribution system. In addition to the triennial lead and copper sampling, LUS has begun preparing for operational changes brought about by the LCRR and LCRI, specifically in developing an LSL inventory to support development of an LSL Replacement Plan, verification of the inventory and revisions to the lead and copper sampling.

5.6.4 Louisiana Pollutant Discharge Elimination System Permits

The water system maintains four LPDES permits as described in the following sections.

5.6.4.1 North Water Treatment Plant LPDES Permit

LPDES Permit LAG380057 permits for the discharge of clarifier sludge and/or clarifier blowdown at Outfall 004. The permit is effective as of December 17, 2020, and expires five (5) years from the effective start date.

5.6.4.2 Jim Love Water Treatment Plant (South Plant) LPDES Permit

LPDES Permit LA0079278 permits for the discharge of storm water or process flows at five storm water outfalls. The permit is effective as of June 1, 2020, and expires five (5) years from the effective start date.

5.6.4.3 North Booster Well Treatment and Storage Facility

LPDES Permit LAG380096 permits for the discharge of storm water or process flows to outfalls at the North Booster Well Treatment and Storage Facility located at Gloria Switch Road. The permit is effective as of December 17, 2020, and expires five (5) years from the effective start date.

5.6.4.4 Commission Boulevard Water Treatment Plant

LPDES Permit LAG380171 permits for the discharge of filter backwash water at Outfall 002. The permit is effective as of October 12, 2022, and expires three (3) years from the effective start date.

5.6.5 Spill Prevention Control and Countermeasures Plan

SPCC plans are required to comply with state and federal regulations if facilities are proximate to U.S. waters. Compliance is required by facilities which are subject to spills of oils, fuels, or other controlled substances and have a storage capacity of more than 1,320 gallons at a single facility. SPCC Plans are required at the North Water Treatment Plant and the Jim Love Treatment Plant and were prepared for each facility in 2006. Each water treatment plant SPCC Plan was last reviewed for substantial changes in May 2017. SPCC Plans must be reviewed every five (5) years or upon significant change in oil storage or if a spill incident occurs. According to LUS, no significant changes were made in 2023.

5.7 Contracts and Agreements

LUS owns, operates, and maintains a regional Water System that serves customers both inside and outside its City limits. Services are provided on a retail and wholesale basis outside the City, including seven wholesale customers governed by six contracts. Wholesale customers are comprised of two water districts and five neighboring water systems or cities including:

- Waterworks District North (retail and wholesale)
- Waterworks District South
- The City of Scott
- The City of Broussard
- Milton Water System
- The City of Youngsville
- The City of Carencro (emergency supply only; not a typical wholesale customer)

LCG also provides billing services on behalf of Waterworks District North to its retail customers. Both the North and South Waterworks Districts constructed their own additions and extensions following LUS construction standards. In addition to its wholesale contracts, LCG has a contract to provide emergency back-up water service to the City of Carencro. This agreement was signed in 1980 and has no expiration.

Wholesale customers represented 32.1 percent of total water sales volume and 31.6 percent of the total water sales revenue in 2023, respectively. While both wholesale water demand and revenues have increased recently, retail revenues have increased proportionally more due to recent retail rate increases. Table 5-17 and Table 5-18 summarize the historical wholesale water demand and revenues by customer.

Table 5-17: Wholesale Water Sales by Customer (1,000 gallons)

Customer	2019	2020	2021	2022	2023
City of Scott	365,611	332,496	347,494	355,242	363,903
City of Broussard	332,037	219,374	246,489	274,427	328,428
City of Youngsville	367,097	449,303	464,766	514,235	561,177
Milton Water System	240,071	246,763	252,743	257,228	249,549
Waterworks District North	324,787	376,549	442,626	450,704	472,329
Waterworks District North - Wholesale	227,818	213,567	215,592	214,695	195,462
Waterworks District South	314,507	353,520	352,314	357,939	390,304
Total Wholesale Water Sales	2,171,928	2,191,571	2,322,023	2,424,469	2,561,153
Total Water Sales (Wholesale and Retail)	7,320,533	7,267,453	7,385,789	7,615,297	7,973,060
Percent of Total Sales from Wholesale	29.7%	30.2%	31.4%	31.8%	32.1%

Source: LUS Financial and Operating Statements

Table 5-18: Wholesale Water Revenues by Customer

Customer	2019	2020	2021	2022	2023
City of Scott	$997,561	$909,160	$961,493	$1,015,039	$1,070,547
City of Broussard	879,643	590,437	675,657	794,178	949,453
City of Youngsville	934,361	1,240,640	1,265,506	1,483,373	1,641,465
Milton Water System	602,054	675,946	693,552	746,419	726,249
Waterworks District North	944,243	1,394,202	1,809,916	1,662,278	1,819,866
Waterworks District North - Wholesale	588,692	571,651	588,080	628,268	564,823
Waterworks District South	815,953	973,644	962,614	1,030,402	1,152,202
Total Wholesale Water Revenues	$5,762,507	$6,355,680	$6,956,818	$7,359,956	$7,924,605
Total Water Sales (Retail & Wholesale)	$20,524,232	$21,144,642	$21,710,500	$22,574,345	$25,078,861
Percent of Total Sales from Wholesale	28.1%	30.1%	32.0%	32.6%	31.6%

Source: LUS Financial and Operating Statements

A summary of wholesale contract terms is presented in Table 5-19. No amendments have been made to the duration of wholesale contract terms since 2019.

Table 5-19: Wholesale Water Contract Terms

Customer	Contract Date	Term in Years	Termination Date
Water District North – Full Service – Phase 1, 2, 3, 4 (NE area, NW area, Scott area)	October 17, 2002	30	October 17, 2032
Waterworks District North – Wholesale	October 17, 2002	30	October 17, 2032
City of Scott	May 28, 1997	41	May 31, 2038
City of Broussard	March 5, 1998	40	July 31, 2038
Milton Water System	April 28, 1997	40	April 28, 2037
City of Youngsville	December 24, 1998	40	December 24, 2038
Waterworks District South	October 13, 1995	40	October 12, 2035
City of Carencro (1)	March 28, 1980	N/A	None

Source: LUS

(1) Letter Agreement with the City of Carencro on an emergency back-up basis. The rate charged will be the same as the current City of Scott rate. As per information received from LUS's Water System, LUS supplied water to the City of Carencro under this letter agreement fewer than five times.

Although no changes have been made regarding contract termination dates, a handful of amendments have been made to the terms of the contracts and to the wholesale systems themselves. In 2022, LUS agreed to use Contribution in Aid of Construction (CIAC) funds to pay for a new wholesale master meter for the Milton Water System. The new master meter will help LUS more accurately supply the requested volumes to the Milton water system. LUS is continuing to work on the master meter for Milton Water System and is working with property owners to find a site and get approvals for servitudes acquisition.

In 2022, the City of Broussard put a well back into operation that services areas within their city limits. The City of Broussard intends to keep this well in operation, which will change the service territory identified in the agreement. LUS expects the contract amendment to update the service territory accordingly.

Lastly in 2022, Water District North and LUS amended their wholesale agreement terms relating to the districts administration of sewer service, including billing and collections, for LUS water customers receiving sewer service within the districts service area. Water District North has also agreed for LUS to install additional fire hydrants into the Water District North system. LUS will own and maintain the fire hydrants in the water districts distribution system.

In 2023, Magnolia Water Utility Operating Company, LLC took over Total Environmental Solutions Inc. (TESI). LUS has third party agreements through the City of Broussard and Water District South to TESI. An Amendment was made to recognize the acquisition by Magnolia.

5.8 Utility Benchmarking

5.8.1 Utility Rates

LUS's residential and commercial water rates have historically been among the lowest in the state and surrounding region. Table 5-20 and Table 5-21 provide a regional comparison of effective water rates for residential and commercial customers, respectively.

Table 5-20: Residential Rate Comparison

Utility	Average ($/1,000 gallons) (1)
LUS	$ 2.68
Alexandria	$ 3.19
Lake Charles	$ 3.93
Shreveport	$ 3.79
Baton Rouge	$ 4.68
New Iberia	$ 5.60
New Orleans	$ 9.79

Source: LUS. Rates as of November 1, 2022.
(1) Assumes monthly water consumption of 7,000 gallons.

Table 5-21: Commercial Rate Comparison

Utility	Average ($/1,000 gallons) [1]
LUS	$ 3.23
Alexandria	$ 3.27
Shreveport	$ 4.28
Lake Charles	$ 4.79
Baton Rouge	$ 4.87
New Iberia	$ 4.81
New Orleans	$ 9.77

Source: Burns & McDonnell . Rates as of November 1, 2022.
(1) Assumes monthly water consumption of 30,000 gallons.

Burns & McDonnell completed a water rate study in FY 2022 proposing 8 percent increases in FY 2023, FY 2024, and FY 2025. The new water rates for FY 2023 were put in service on November 1, 2022. In 2023 LUS contracted Burns and McDonell to update the rate study through FY 2028. The updated study maintained the 8 percent increases through FY 2025 and proposed 5 percent increases in FY 2027 and FY 2028. LUS has not yet requested City council for approval for the FY 2027 and FY 2028 water rate increases.

Wholesale rates are evaluated every other year through a cost-of-service study. Wholesale water rates were increased 10 percent in 2024 and will increase another 9 percent in 2025. LUS anticipates increasing wholesale rates at least 8 percent in 2026.

5.8.2 Financial and Operating Statistics

The American Water Works Association ("AWWA") annually publishes benchmarking data across a variety of performance indicators for water and wastewater utilities. The *2023 AWWA Utility Benchmarking: Performance Management for Water and Wastewater* was released in early 2024, compiling various financial and operating ratios from 2022. For this analysis, specific ratios were obtained from the AWWA report representing national and regional medians. The AWWA defines national metrics as water utilities in both the United States and Canada, hereafter referred to as "National." Ratios are also available by region and by number of water customers served. The U.S. South region was used, which includes Louisiana and is hereafter referred to as "Regional." Further, ratios are available specifically for water utilities, wastewater utilities, and combined water and wastewater utilities. Where possible, comparisons have been made to water utility ratios. However, some LUS balance sheet information is available only for the combined Electric, Water and Wastewater Utilities System, hereafter referred to as “Combined.” The AWWA “Combined” benchmarking data only includes water and wastewater utilities.

LUS’s operating ratio benchmark results are presented in Table 5-22. LUS’s water operational costs are lower than the National and Regional medians. LUS’s combined debt ratio is lower than the Regional and National median. The operating ratio is higher, on a combined basis, than the National and Regional medians. However, the AWWA combined utilities median includes water, wastewater, and storm water, while LUS includes water, wastewater and electric. LUS’s cash reserves are lower than the National and Regional medians. Debt service coverage for LUS is higher than both the National and Regional medians on both a water-only and combined basis.

Table 5-22: Benchmarked Water Utility Operating Ratios

		National[1]	Regional	LUS	
Statistics	**Basis**	**2022**	**2022**	**2022**	**2023**
Operational Costs per MG	Water	$4,231	$2,510	$1,713	$1,825
Debt to Total Assets (Debt Ratio)	Combined	0.32	0.49	0.32	0.29
Operating Ratio (O&M cost/ Operating revenue)	Water	0.58	0.52	0.66	0.68
Operating Ratio (O&M cost/ Operating revenue)	Combined	0.46	0.50	0.74	0.69
Cash Reserve Days[2]	Combined	334	374	61	51
Debt Service Coverage	Water	2.17	3.41	3.65	4.27
Debt Service Coverage	Combined	2.29	2.20	3.29	3.83

Source: AWWA and LUS
(1) National AWWA benchmarks for water and combined water and wastewater utilities with 50,001 to 100,000 customers to align with the Water System customers served.
(2) LUS results based on total O&M for Electric, Water, and Wastewater Systems less fuel and purchased power expenses.

5.9 Historical Financial Performance

Table 5-23 presents historical debt service and the associated DSCR. Historical Water System debt service as shown below includes a portion of the Series 2010 bonds, Series 2012 Bonds, Series 2017 Bonds, Series 2019 Bonds, and Series 2021 Bonds. The Series 2010 Bonds were fully redeemed by the proceeds of the Series 2017 Bonds on November 1, 2020. The Series 2012 Bonds were fully refunded by the proceeds of the Series 2021 Bonds in FY 2022. In each year since 2019, the DSCR exceeded the minimum coverage requirement of 1.0 required by the Bond Ordinances. The Series 2023 Bonds were issued on November 15, 2023, and will be included in LUS debt service beginning in 2024.

Table 5-23: Historical Financial Performance

Fiscal Year	Operating Revenues (1)	Operating Expenses (2)	Net Revenues Available for Debt Service	Debt Service (3)	Debt Service Coverage Ratio
2019	21,369,475	14,227,206	7,142,269	1,899,168	3.8
2020	21,696,556	13,159,106	8,537,450	2,276,675	3.7
2021	21,904,303	13,833,990	8,070,313	2,207,678	3.7
2022	22,964,906	15,000,437	7,964,469	2,182,638	3.6
2023	26,380,823	17,071,411	9,309,411	2,182,457	4.3

Source: LUS Financial and Operating Statements

(1) Operating Revenues include interest income and other miscellaneous income.

(2) Operating Expenses include O&M and other expenses such as customer service and A&G costs. Operating Expenses do not include ILOT, normal capital and special equipment, and other miscellaneous expenses.

(3) Debt Service was prepared on a cash basis for this table and includes a portion of the Series 2010 Bonds, Series 2012 Bonds, Series 2017 Bonds, Series 2019 Bonds, and Series 2021 Bonds. The Series 2010 Bonds were fully redeemed by the Series 2017 Bonds on November 1, 2020. The Series 2012 Bonds were fully refunded with the Series 2021 Bonds in FY 2022.

5.9.1 Rate Structures

The Water System provides service to retail and wholesale customers. Wholesale customers are outside the City limits and are served on a contract basis. Retail customers are served both inside and outside the City limits. Water System customer classes include residential, commercial, schools and churches, and special contract customers for bulk water. The Water System rate structure for retail customers includes a customer charge that varies based on the meter size, and a commodity charge that is based on usage in thousand gallons. The commodity charge for Residential customers includes a uniform rate per thousand gallons in the winter period (December through March) and an inclining block rate structure in the summer period (April through November). Burns and McDonnell was contracted to perform a rate study for the water utility in FY 2022. The rate study proposed 8 percent increases per year from FY 2023 through FY 2025 which was adopted. Table 5-24 presents the retail rate schedule for LUS in FY 2023.

Table 5-24: Retail Rate Schedules

Rate Class	Rate Class	Serves	Effective Date	Meter Size (inches)	Customer Charge ($/month)	Winter Commodity Rate ($/1,000 gallons)	Summer Commodity Rate Tier 1 ($/1,000 gallons)	Summer Commodity Rate Tier 2 ($/1,000 gallons)	Monthly Commodity Rate ($/1,000 gallons)
W-1	W-1	Residential	Nov-22	0.75	$5.99	$1.82	$1.82	$2.89	NA
				1.00	$9.99	$1.82	$1.82	$2.89	NA
				1.50	$19.98	$1.82	$1.82	$2.89	NA
				2.00	$31.97	$1.82	$1.82	$2.89	NA
				3.00	$59.94	$1.82	$1.82	$2.89	NA
				4.00	$99.90	$1.82	$1.82	$2.89	NA
				6.00	$199.80	$1.82	$1.82	$2.89	NA
				8.00	$319.68	$1.82	$1.82	$2.89	NA
W-1-O	W-1-O	Residential Non-City	Nov-22	0.75	$11.98	$3.64	$3.64	$5.78	NA
				1.00	$19.98	$3.64	$3.64	$5.78	NA
				1.50	$39.96	$3.64	$3.64	$5.78	NA
				2.00	$63.94	$3.64	$3.64	$5.78	NA
W-2	W-2	Commercial	Nov-22	0.75	$5.99	NA	NA	NA	$2.13
				1.00	$9.99	NA	NA	NA	$2.13
				1.50	$19.98	NA	NA	NA	$2.13
				2.00	$31.97	NA	NA	NA	$2.13
				3.00	$59.94	NA	NA	NA	$2.13
				4.00	$99.90	NA	NA	NA	$2.13
				6.00	$199.80	NA	NA	NA	$2.13
				8.00	$319.68	NA	NA	NA	$2.13
W-2-O	W-2-O	Commercial Non-City	Nov-22	0.75	$11.98	NA	NA	NA	$4.26
				1.00	$19.98	NA	NA	NA	$4.26
				1.50	$39.96	NA	NA	NA	$4.26
				2.00	$63.94	NA	NA	NA	$4.26

Source: LUS FY 2023 Rate Schedules

Burns & McDonnell was contracted in FY 2023 to perform a rate study update which proposed rate increases of 5 percent per year in FY 2027 and FY 2028. The rate study was completed in early FY 2024 however LUS has not yet requested approval for the FY 2027 and FY 2028 water rate increases.

5.9.2 Revenue Analysis

Table 5-25 presents the Water System revenues. The total retail revenues decreased by 2.7 percent in 2019 due to lower sales. In 2020, total retail revenues increased 0.8 percent, with higher Residential sales and revenues largely offset by lower sales and revenues from non-residential classes, a dynamic influenced heavily by the onset of the COVID-19 pandemic. In 2021 revenues swung in the opposite direction with a 1.3 percent decrease in retail revenues. The decline in retail revenues was more than offset by increases in wholesale revenues in 2021. The revenues increased by 3.7 percent in FY 2022 due to sales growth in all classes. FY 2023 revenues increased by 12.8 percent. The increase in water revenue was largely due to rate increases implemented in FY 2023 and higher volumes due to drought conditions impacting the service area.

Table 5-25: Retail Revenues by Class

	2019	2020	2021	2022	2023
Revenues					
Residential	$8,181,849	$8,515,274	$8,278,311	$8,567,430	$9,800,373
Commercial	5,464,127	5,355,309	5,387,432	5,528,945	6,101,355
Schools & Churches	534,520	473,545	495,568	541,104	652,084
Other	244,873	200,216	197,356	250,899	233,747
Total	$14,425,369	$14,544,345	$14,358,667	$14,888,377	$16,787,559
Number of Customers					
Residential	44,633	43,627	44,033	44,340	44,870
Commercial	6,899	6,824	6,857	6,893	6,994
Schools & Churches	317	317	322	324	334
Other	281	285	287	290	283
Total	52,130	51,054	51,498	51,846	52,481
Revenue per Customer					
Residential	$183	$195	$188	$193	$218
Commercial	792	785	786	802	872
Schools & Churches	1,685	1,494	1,539	1,671	1,953
Other	871	702	687	866	826
Total	$277	$285	$279	$287	$320
Sales (1000 gallons)					
Residential	2,561,224	2,681,717	2,616,072	2,669,588	2,892,159
Commercial	2,237,397	2,130,776	2,176,190	2,198,059	2,189,244
Schools & Churches	248,388	187,246	198,768	223,420	244,288
Other	101,596	76,143	72,736	99,760	86,215
Total	5,148,605	5,075,882	5,063,766	5,190,827	5,411,907
Sales (1000 gallons) per Customer					
Residential	57	61	59	60	64
Commercial	324	312	317	319	313
Schools & Churches	783	591	617	690	732
Other	361	267	253	344	305
Total	99	99	98	100	103
Revenue per 1000 gallon					
Residential	3.19	3.18	3.16	3.21	3.39
Commercial	2.44	2.51	2.48	2.52	2.79
Schools & Churches	2.15	2.53	2.49	2.42	2.67
Other	2.41	2.63	2.71	2.52	2.71
Total	2.80	2.87	2.84	2.87	3.10

Source: LUS Financial and Operating Statements

5.9.3 Expense Analysis

Table 5-26 shows historical water operating expenses, distinguished between fixed and variable costs. Variable operating expenses within Power & Pumping include purchased power costs, while variable operating expenses within Purification include chemical costs. Fixed operating expenses include Source of Supply, a portion of Power & Pumping and Purification, Distribution, Customer Service, and Administrative and General ("A&G") expenses. Historically, variable expenses average between 21 and 25 percent of total expenses. In FY 2023, both fixed and variable expenses increased in multiple categories. Increases in variable expenses were primarily due to large increases in both chemicals and labor costs. Fixed cost increases in FY 2023 were primarily attributed to inflationary pressures in personnel and contractor costs consistent with utility costs across the United States.

Table 5-26: Historical and Variable Expense Summary

	2019	2020	2021	2022	2023
Variable Expenses					
Power & Pumping	$461,845	$465,557	$514,181	$658,324	$533,513
Purification	2,675,900	2,372,173	2,371,988	2,872,063	3,731,270
Total Variable Expenses	$3,137,745	$2,837,730	$2,886,168	$3,530,386	$4,264,782
Fixed Expenses					
Source of Supply	$183,896	$179,867	$198,013	$237,188	$239,995
Power & Pumping	303,191	274,159	299,671	420,183	386,487
Purification	1,871,480	1,716,917	1,862,694	1,674,674	2,000,207
Distribution	2,889,727	2,098,086	2,174,002	2,053,244	2,600,014
Customer	1,172,251	1,295,339	1,446,359	1,736,861	1,754,984
A&G	4,668,916	4,757,007	4,967,083	5,347,900	5,824,942
Total Fixed Expenses	$11,089,461	$10,321,376	$10,947,822	$11,470,051	$12,806,629
Total Fixed & Variable	$14,227,206	$13,159,106	$13,833,990	$15,000,437	$17,071,411
Percent Variable	22%	22%	21%	24%	25%
Percent Fixed	78%	78%	79%	76%	75%

Source: LUS Financial and Operating Statements

5.9.4 Recovery of Costs

Water system retail sales are affected by weather, economic conditions, and perhaps most notably in 2020 and 2021, the COVID-19 pandemic. Volatility of water demand caused by these dynamics can impact the stability of revenues. As presented in Table 5-26, expenses are largely fixed and are generally not as susceptible to weather or economic variances. However, as LUS has come out of the COVID-19 pandemic and realized many of the same inflationary pressures as utilities across the United States, both its fixed and variable expenses increased considerably as compared to the low expenses incurred in FY 2020. Regardless of the underlying cause, the predominately fixed-cost nature of the Water System cost structure and the highly variable nature of its revenue stream can put pressure on utility cash flows when demand is disrupted. The mismatch between a high fixed cost structure and a high variable cost revenue stream is a common challenge in the water utility industry.

5.10 Observations and Recommendations

Based on the analysis described herein, Burns & McDonnell presents the following observations and recommendations.

- Based on visual inspection of facilities, review of records, and interviews of LUS staff, the LUS water treatment facilities are in good condition, maintained properly and in accordance with industry practices.
- The organizational structure and management of the water system engineering and operations areas appears to be strong based on initial observations, interviews, organizational structures, and manpower within each department.
- As mentioned previously in the electric utility system findings, all LUS departments are having challenges attracting and retaining staff due to lower than market labor rates and a competitive labor market. LUS should act immediately to remedy this as recommended previously.
- LUS completed a rate study in FY 2022 and the proposed rate plan was adopted. The adopted rate increases are expected to generate revenues that will allow LUS to continue to maintain its financial performance. New water rates were put into place effective November 1, 2022. LUS completed another rate study in FY 2023 which proposed additional 5 percent rate increases in FY 2027 and FY 2028. LUS has not yet requested approval for the FY 2027 and FY 2028 water rate increases.
- LUS issued new bonds in the beginning of FY 2024 to support various electric, water, and wastewater projects. The bond funding is reasonable and appropriate to fund these projects and the forecasted revenues represented in the continuing disclosure financial projections are forecasted to fund the new debt service associated with the new bonds.
- Water wholesale sales represent roughly 30 percent of total demand and revenue over the last five years. LUS coordinates closely with its wholesale customers regarding growth for planning purposes and should continue to do so. LUS has recently increased its wholesale rates in FY, 2023 and FY 2024 and is planning to implement additional wholesale water rate increases in FY 2025.
- Academic studies of the Chicot aquifer conducted within the past decade have sought to assess the outlook of future water availability in the region due to groundwater withdrawals that may be resulting in saltwater intrusion, water quality degradation, and land subsidence. LUS should continue maintaining awareness of the long-term availability and viability of the Chicot aquifer as a regional

water source.

- LUS has begun preparing for operational changes brought about by the LCRR, specifically in developing a lead service line (“LSL”) inventory to support development of an LSL Replacement Plan and revisions to the lead and copper sampling. On November 30, 2023, EPA announced the proposed Lead and Copper Rule Improvements ("LCRI"), which included modifications to the LCRR requirements. This update focused on the replacement of 100% of lead pipes in drinking water systems within 10 years of the promulgation of this legislation, requiring that LUS identify any unknown materials on the system-side and customer-side of the water service. LUS has begun preparing for operational changes brought about by the LCRR and LCRI. The EPA mandated all systems with any LSLs to prepare and submit to its State regulatory agency the LSL inventory, along with an LSL Replacement Plan and publicly accessible inventory by October 16, 2024. LUS is actively working on completing the LSL Inventory and Replacement Plan and is expected to submit them by the deadline. LUS plans to launch a website to make the LSL Inventory accessible to the public.
- Overall unaccounted for water (i.e. losses) on a percentage basis have increased over the last five years. With relatively steady water production and a general decline in water sales, unaccounted for water has increased from 7.4 percent in 2016 to approximately 12.5 percent from 2020 to 2022. In 2023, unaccounted for water increased to 14.5 percent. LUS previously engaged the services of Water Company of America to evaluate water loss in the LUS distribution system, enabling LUS to monetize a portion of previously unaccounted for water prior to 2022. The increase in water loss in 2023, despite the mitigation efforts by LUS, is believed to be caused by drought and leaking water mains. Other strategies LUS is currently implementing to resolve water loss include improving the reliability of water metering and public outreach. LUS has already replaced more than half of its water meter modules as of the completion of this report.
- Water main breaks have trended upwards over the previous 5 years. During the same period, LUS has replaced water mains at a rate of less than 0.1% per year. LUS should consider planning for renewal and replacement of aging infrastructure over its anticipated service life. LUS was awarded $5M in federal funds for water main replacements and plans to provide $3M of LUS funds to increase the amount of water main replacements in the near-term. Additionally, LUS plans to hire contractors for the replacement and repair of water mains to augment the capabilities of LUS staff.
- For both the Jim Love Water Treatment Plant and North Water Treatment Plant, LUS could consider implementing additional safety measures for chlorine gas cylinders in the event of a pressurized discharge. Potential safety measures could include using containment vessels for in-use cylinders or a

scrubber system to ensure that a chlorine gas leak is safely contained. Currently, there are no provisions to contain a pressurized leak other than on-call services by the chlorine gas supplier.

- Recent drought has highlighted the opportunity to bolster LUS water supply capacity. As part of this initiative, LUS should consider developing additional water supply wells to meet peak demand while also providing additional well redundancy. Based on differences between water treatment and current firm well capacities, suggested areas for consideration of additional wells include the JLWP, NWP, Commission Boulevard Plant, Gloria Switch, and the North Service Area. Projects are currently planned for new wells at the JLWP (2027), the Commission Boulevard Plant (2026), and the Gloria Switch Site (2028). LUS should consider the need for additional water supply wells in the North Service Area.

- Additional water storage is another measure that LUS could consider for added system resiliency and redundancy. For both the JLWP and NWP, additional ground storage will be added in the near future. The five-year capital improvement program has identified budgets for these improvements. A project at the JLWP to install a new 1.25-M gallon GST is expected to be commissioned in 2024 and a project for the NWP is planned for 2026. LUS should consider evaluating the benefit of additional water storage at water treatment plant sites or within the distribution system as part of a water system master plan.

- Both the Jim Love Water Treatment Plant and North Water Treatment Plant lack the ability to provide full backup power with existing generators. LUS could consider purchasing additional portable emergency generators to provide the full power load requirement of all water supply wells at both the JLWP and NWP during an outage. This would entail two (2) or more additional generators for the JLWP and one (1) or more additional generators for the NWP.

- The 16-inch diameter finished water pipeline that conveys water out of the North Water Treatment Plant to the distribution system presents a hydraulic bottleneck and restricts the amount of finished water able to leave through that line likely due to calcium carbonate scale accumulation. LUS staff have reported increasing frequency of pressure loss events (i.e., less than 20 psi) in this service area, despite proximity to the NWP high service pumps and the North Park Elevated Tower. LUS could consider performing a system-pressure study with focus on the north service area and developing a program to replace the water mains in this area.

- LUS could consider using a product of at least 70 percent orthophosphate (and 30 percent polyphosphate) as opposed to the currently used polyphosphate to provide corrosion control for the distribution system.

- The JLWP and NWP lime systems were noted to not have the ability to feed chemical based on concentration set point and plant flow rate. It is suggested that LUS evaluate rehabilitating or replacing the lime feed systems with new units that will give operators the ability to control dose. Additionally, LUS should consider performing a technical evaluation of the water quality being sent to the distribution system with emphasis on finished water corrosion indices (i.e., Langelier Saturation Index, in addition to others), lime feed, and coagulant chemical selection.

- LUS last completed a Water Master Plan in 2001. Due to development that has occurred since then, LUS should consider an update its master plan to project future growth and associated water flow rates; assess existing and future water system capacity and storage needs; and identify long-term capital improvements required for future development, system expansion, and condition-related improvements. The results of that assessment could be used to further develop capital improvement planning to address critical assets over a long-term period, with targeted strategies to address high-priority items. This effort could include planning for renewal and replacement of aging infrastructure over its anticipated service life. LUS initiated discussions about the scope of such evaluations in 2023.

6.0 WASTEWATER UTILITY SYSTEM

6.1 Wastewater Utility Summary

LUS provided wastewater conveyance, treatment, and sludge management and disposal services to 47,446 retail customers in 2023. Key infrastructure includes 707.5 miles of sanitary sewer mains, 201 total lift stations (including LUS and private lift stations), four wastewater treatment plants, and sludge management and disposal facilities. The total combined permitted treatment capacity of the four plants is 18.5 MGD, while the total combined flow holding capacity at the four plants is 38.5 M gallons. LUS is also responsible for operating and maintaining approximately 22 small package wastewater treatment plants that primarily serve subdivisions and rural areas into the main LUS Wastewater System. Twenty-one (21) of the small package wastewater treatment plants have their own discharge permit.

Wastewater system collected flow increased in 2023 by approximately 5 percent compared to 2022 flows. Historical Wastewater System collected flows are shown in Table 6-1.

Table 6-1: Wastewater System Historical Retail Collection

Fiscal Year	(1000 gallons) (1)(2)
2019	5,746,278
2020	5,498,088
2021	6,328,515
2022	5,043,306
2023	5,312,157

Source: LUS Financial and Operating Statements
(1) The Wastewater System does not provide wholesale service.
(2) Retail Collection is not associated with the gallons used for billing wastewater customers.

6.2 Wastewater Treatment

LUS owns and operates four wastewater treatment plants ("WWTPs"): the South Sewage Treatment Plant ("SSTP"), the East Sewage Treatment Plant ("ESTP"), the Ambassador Caffery Treatment Plant ("ACTP"), and the Northeast Treatment Plant ("NETP"). The combined average day treated flowrate for these WWTPs in 2023 was 14.6 MGD and the total permitted capacity is 18.5 MGD as summarized in Table 6-2.

Table 6-2: Wastewater Treatment and Storage Summary

Facility	2023 Average Flow (MGD)	Permitted Capacity (MGD)	Wet-Weather Storage Capacity (MG)
South Sewage Treatment Plant	5.42	7.0	3.5
East Sewage Treatment Plant	2.83	4.0	3.0
Ambassador Caffery Treatment Plant	4.90	6.0[(1)]	7.0
Northeast Treatment Plant	1.16	1.5	10.0
Total	14.3	18.5	23.5

Source: LUS
[1] Permitted capacity is 6.0 MGD; however, plant treatment capacity is 9.25 MGD.

The LUS wastewater system is a separate sanitary sewer system, consisting of an interconnected network of piping and lift stations that conveys sewage to the WWTPs. LUS staff have indicated the majority of wastewater treated at the WWTPs is domestic wastewater, with relatively little industrial wastewater flows. During wet weather events with large amounts of precipitation, the WWTPs may be undersized to completely treat peak flows associated with storm water and groundwater, known as inflow and infiltration (I&I), that enters the sanitary sewer system through cross connections with storm water sources or cracks in pipes or manholes. Influent flow exceeding the WWTPs peak design flow capacity is diverted to on-site wet weather basins. Wastewater diverted to the wet weather basins is stored and treated by the WWTPs when wet weather flows subside. Wet weather flows are generally treated as if they are typical sewage. Influent flow exceeding the capacity of the on-site wet weather basins may be bypassed around biological treatment processes but is disinfected prior to discharge to the Bayou St. Claire and Vermillion River, but this occurs very rarely only during an extreme weather event.

Since wastewater treatment uses microorganisms for removal of organics, a portion of the biomass waste or sludge streams must be continuously removed from the WWTPs. Final disposal of biosolids (i.e., dewatered sludge from the WWTPs) is accomplished by land application at several farms in the Lafayette area. Three of the WWTPs use mechanical dewatering devices to further concentrate the solids (to approximately 22 to 27 percent solids by weight) and reduce the total volume of biosolids to be land-applied. The NETP does not use mechanical dewatering and LUS hauls liquid sludge from the NETP to the SSTP for additional treatment and dewatering.

The Louisiana Department of Environmental Quality (LDEQ) has limited discharge loading into the Vermillion River. As such, treatment of wastewater needs to be performed to levels that reduce the 5-day carbonaceous biological oxygen demand (“BOD5”), total suspended solids (“TSS”), and ammonia in the effluent streams of the WWTPs, in accordance with each facility’s LPDES permit.

The projected capital improvement program for wastewater treatment from 2024 to 2028 is summarized in Table 6-3. Specific projects indicated in the program include headworks rehabilitation and digester rehabilitation at the ACTP; pond cleaning, a planned plant expansion and addition of clarifiers, discharge realignment, and sludge holding tank at the NETP; odor control upgrades, sludge handling improvements, and digester rehabilitation at the SSTP; headworks rehabilitation, pump station rehabilitation, grit removal improvements, and digester rehabilitation at the ESTP; PLC replacements; and a Sewer System Master Plan. The last major project performed was the installation of sludge handling equipment and new aerobic digesters at the SSTP which was substantially completed in 2022 and operational in 2023. Future phases of improvements at the SSTP, including flow handling and odor control improvements, are planned from 2024 to 2025. In addition to these specific projects, LUS has established annual allocations for various treatment projects and property purchases.

Table 6-3: Wastewater Treatment Projected CIP

	2024	2025	2026	2027	2028	Total
Wastewater Treatment Total	$3,085,000	$3,660,000	$3,760,000	$3,660,000	$6,860,000	$21,025,000

Source of data: LUS

6.2.1 South Sewage Treatment Plant

The SSTP treated an average flowrate of 5.42 MGD in 2023 and is permitted to treat up to 7 MGD. The SSTP headworks currently receive wastewater from the on-site main pump station and the primary force main from the Acacia Lift Station across the Vermilion River. All influent flows pass through rotary drum screens and vortex grit removal processes to separate large debris and sediment from the water to improve treatability. Grit and screenings are conveyed to dumpsters for offsite disposal. After pretreatment, the SSTP flow splits between two treatment trains: the East Side train and the West Side train. Each train uses activated sludge (i.e., a mixture of microbial organisms and sewage which are oxygenated for nutrient removal) followed by circular clarifier basins and chain-and-flights final clarifiers. Treated water is then disinfected with chlorine, and finally dechlorinated prior to discharge to the Vermilion River. A limited volume of treated water is stored in an on-site tank for non-potable uses. The SSTP has an odor control system installed at the plant. During wet weather events, the SSTP is configured to segregate influent flow into an on-site 3.5 M gallon wet weather storage basin.

The sludge goes through aerobic digestion (i.e., biological digestion of nutrients in the presence of both free and bound oxygen) to further breakdown organic content. Digested sludge is then dewatered by a belt filter press. The solids from the belt filter press are then land applied, and the liquid removed is sent back to the plant headworks.

LUS is implementing a major effort to increase treatment capacity at the SSTP in phases. In 2023, a new sludge processing building with new belt filter presses and new aerobic digesters was put into operation. In 2024, LUS is planning to expand liquid treatment capacity with new sequenced batch reactors (SBRs) and expansion of the chlorine disinfection chamber. As noted in previous reports, wastewater from the Old Maurice Lift Station that was originally processed at the ACTP will be conveyed through a force main to the SSTP. In addition to the liquid treatment expansion, planned capital improvements at the SSTP include:

- Odor control improvements
- Replacement of rotating drum screens
- Aerobic digester rehabilitation
- Conference room roof replacement

6.2.2 East Sewage Treatment Plant

The ESTP receives waste flows along the I-49 corridor area of Lafayette and has a permitted capacity of 4 MGD. In 2023, the average treated flow was 2.83 MGD. Wastewater flows into the ESTP dry pit area via gravity and is pumped from the dry pit to the plant headworks. Treatment at the ESTP consists of rotary drum screens and diffused air grit removal for pretreatment, followed by primary clarifiers, oxidation ditches, final clarifiers, chlorine disinfection, and dechlorination. An odor control system is utilized throughout the facility. Sodium hypochlorite is used for odor control. Liquid chlorine is used for wastewater effluent disinfection. Treated effluent is stored in an on-site tank for non-potable uses or discharged to the Vermillion River. During wet weather events, the ESTP is configured to segregate influent flow into an on-site 3.0 M gallon wet weather storage basin via dedicated wet weather pumps.

The sludge goes through a thickening process followed by anaerobic digestion to further breakdown organic content to a Class B biosolid. The floating lid on one of the anaerobic digesters was replaced in 2020; the lid on the other anaerobic digester is planned to be replaced with a new dome in 2024. Following digestion, digested sludge is dewatered by a belt filter press. The solids from the belt filter press are then land applied, and the removed liquid is sent back to the plant headworks. A segment of land at the Vermilion Conference Center, adjacent to the ESTP, was previously purchased by LUS. LUS envisions utilizing the property to relocate existing structures when a major expansion of I-49 is implemented. The timing of the I-49 expansion is unknown at this time. Additional capital improvements planned at the ESTP include:

- Grit system rehabilitation
- Odor control rehabilitation
- Anaerobic digester rehabilitation
- Installation of a new sludge dryer

6.2.3 Ambassador Caffery Treatment Plant

The ACTP treated an average flow rate of 4.90 MGD in 2023 and is permitted to treat up to 6 MGD (the design capacity of this plant is 9.25 MGD). Wastewater flows into the ACTP through a gravity-fed dry pit area which is then pumped from the dry pit to the plant headworks, or through a collection of force mains which pump directly to the plant headworks. Pretreatment at the ACTP consists of rotary drum screens or bypass bar screen and vortex grit removal. Flow is then split to two different aerobic treatment processes, sequencing batch reactors (SBRs) or oxidation ditches, followed by final clarifiers, then flow is combined for chlorine disinfection, and dechlorination. During wet weather events, the ACTP is configured to segregate influent flow into an on-site 7 M gallon wet weather storage basin. In 2024, numerous repairs are in progress or planned at the headworks and wet weather storage basins, including: expansion joint sealing in storage basins, concrete spalling repair in the bar screen channel, replacement of bar screen, and concrete repair around rotating drum screen foundation.

Sludge is treated through anaerobic digestion to further breakdown organic content in the sludge. Digested sludge is then dewatered by a spiral screw press, which is aided by addition of a polymer. The solids from the screw press are then land applied, and the liquid stream is sent back to the plant headworks. Planned capital improvements at the ACTP include:

- Anaerobic digester tank rehabilitation/improvements
- Rotating drum screen replacement
- Headworks rehabilitation

6.2.4 Northeast Treatment Plant

The NETP treated an average flow rate of 1.16 MGD in 2023, below the permitted capacity of 1.5 MGD. Wastewater flows into the NETP headworks through a collection of local force mains. Pretreatment at the NETP consists of stepping screens and bypass screens and a vortex grit removal chamber. Flow is aerobically treated in oxidation ditches, followed by final clarifiers, chlorine disinfection, and dechlorination using sulfur dioxide. During wet weather events, the NETP is configured to segregate influent flow into an on-site 10-million gallon wet weather earthen storage basin (pond).

The sludge can be mixed with lime via a paddle wheel mixer to produce a homogenized mixture of stabilized sludge to produce Class B biosolids. Addition of lime increases the pH to effectively kill pathogens and microorganisms, in addition to providing some loss of moisture content. The stabilized lime mixture can then be land-applied. Sludge can also be hauled to the SSTP for additional treatment and dewatering without receiving lime stabilization.

It was noted by LUS staff during the February 2024 site visit, the development in the area surrounding the NETP has increased within the last year with at least two (2) subdivisions constructed since the previous report. LUS has observed that wastewater flow to the NETP has been steadily increasing. LUS staff reported that both final clarifiers must be operational to maintain the plant's capacity and meet LPDES permit discharge limits. This limits the staff's ability to complete maintenance activities due to needing to keep both clarifiers in service. Planned capital improvements at the NETP include:

- Installation of additional stabilized sludge holding tank
- Rehabilitation of piping at headworks and clarifiers
- Pond cleaning
- Plant expansion, including the installation of additional clarifiers
- Painting the lime silo
- Rerouting the discharge pipe to the Vermillion River

6.3 Wastewater Collection

As described previously, the LUS wastewater system is a separate sanitary sewer system conveying domestic and industrial sewage. Surface runoff is conveyed through a separate system. The topography of the service area is relatively flat and spans both sides of the Vermilion River. Due to the topography and geographic boundary of the river, the LUS wastewater collection system uses a significant number of lift stations to maintain hydraulic grade line (i.e., overcome natural drainage patterns due to gravity) via pumping. Approximately 30 percent of lift stations are self-priming style suction lift stations, and the remainder are submersible lift stations of various functionality. In recent years, the increasing number of connections and associated pipe, manholes, and lift stations is due to LUS providing sewer service to an increasing amount of new land development. The wastewater collection system infrastructure is summarized in Table 6-4.

Table 6-4: Wastewater Collection System Assets

	2019	2020	2021	2022	2023
Number of Connections	45,942	46,380	47,032	47,115	47,446
Miles of Pipe [1]	692	688.4	693.6	701.4	707.5
Number of Manholes	12,868	13,008	13,120	13,235	13,385
Number of Lift Stations	190	195	198	195	201

Source of data: LUS data, January 31, 2023
(1) Includes gravity sewers and force mains; does not include service laterals.

Wastewater infrastructure (i.e., gravity pipes, force mains, and pump stations) in the downtown and geographically-central areas of the City are undersized to accommodate the recent land development and population density changes in these parts of the service area. The City has largely ceased new housing development in the downtown area because the infrastructure cannot meet conveyance needs. As noted in the 2023 Report, the design project for a new sewer lift station and 20-inch force main to the SSTP to add an additional 2,000-gpm capacity to the downtown area has been completed with construction of the project pending receipt of grant funding. The lift station project is being reviewed by the USEPA prior to allocation of funds, which are earmarked for use. As an update to previous efforts regarding the acquiring of properties for the lift station and force main project, LUS has completed the acquisition of properties along the proposed lift station force main routing. Additionally, installation of SBRs at the SSTP are being planned to handle new and future capacity associated with housing development in the downtown area.

The older, aging, lift stations in the LUS inventory are primarily wet-pit and dry-pit style, with the newer lift stations being submersible style. Improvements to the aging lift stations are being evaluated to convert these to suction-lift style. There continue to be on-going efforts to improve the resiliency of the lift stations by adding quick-connection fittings to the discharge piping, which allow operators to use a portable pump to convey wastewater flows in the event of a power outage. LUS has been upgrading the lift station telemetry (i.e., remote-collection and transmission of data) equipment in recent years on their owned and operated lift stations. As of the end of 2023, LUS-owned and operated lift stations consist of the following telemetry assets: 2 lift stations are equipped with fiber optic, 173 lift stations are equipped with cellular transmission, while 6 are yet to be equipped with telemetry. Approximately 56 lift stations and package plants also include Mission auto-dialers.

The projected capital improvement program for wastewater collection from 2024 to 2028 is summarized in Table 6-5. Specific projects indicated in the program include:

- Improvements (rehabilitation or replacement) of the Acacia, Alice Drive, Beaver Park, Elan, Farrel Road, Locksley, Omega, Ole Colony, Regency, Robley, James Street, South College, and Thomas

Park lift stations.

- Improvements (rehabilitation or replacement) of the Donlon, Smith Point, and University gravity sewers.
- Upgrades to the Consolidated Sewerage District, Kaliste Saloom, Northeast Interceptor, S. Bernard Road, South gravity sewer, Smith Street, and Town Center Parkway sewer to provide additional capacity.
- Improvements (rehabilitation or replacement) of the Elan, Pont Des Mouton, and S. Meyers force mains.
- Construction or procurement of a building to support collection system operation and maintenance activities.

In addition to these specific projects, LUS has established annual allocations for various collection system items, including collection system equipment; I/I elimination; collection system improvements; and upgrades to lift station components (e.g., control panels, equipment, odor control, telemetry). LUS also budgets annual expenditures for sewer system betterments to support proposed developments and sewer easements.

Table 6-5: Wastewater Collection Projected CIP

	2024	2025	2026	2027	2028	Total
Wastewater Collection Total	$10,885,000	$10,290,000	$10,140,000	$5,740,000	$4,930,000	$41,985,000

Source of data: LUS

6.3.1 Operations and Related Performance

6.3.1.1 COVID-19

In the early stages of the COVID-19 pandemic, LUS modified basic operations of the utility to keep non-essential personnel at home when possible. To the extent possible, operations staff were separated to provide that, in the event of an outbreak, staff would not get infected at the same time. LUS staff reported that operations largely returned to a pre-pandemic “normal” in 2021 which has continued through 2023.

6.3.1.2 Capacity, Management, Operations, and Maintenance Program

The EPA performed an audit of LUS’s sanitary sewer system in April 2017 which included the previous wastewater master plan, flow studies, and a tour of the four wastewater plants and some lift stations. Resulting from the audit, an Administrative Order (“AO”) was issued April 24, 2018, with an effective date of May 4, 2018. A general summary of the requirements included in the AO is presented in Table 6-6.

Table 6-6: Administrative Order Requirements and Status

AO Requirement	Description	Status
A	Report information regarding sanitary sewer overflows (SSOs) to LDEQ	Ongoing; included within monthly DMR submittals
B	Remove excess scum and solids from the final clarifier at the South WWTP	Previously Completed
C	Install a fence or signs at the Beaver Park retention pond	Previously Completed
--	Implement multiple utility operation and maintenance (O&M) procedures, programs, and inventories	--
D.1	Standard operating procedure for lift station inspections	Previously Completed
D.2	Training program for staff participating in collection system O&M	Previously Completed
D.3	Critical parts inventory for lift stations and pumps	Previously Completed
D.5	Tracking lift station O&M activities in LUS's asset management program	Previously Completed
--	Repair deficient lift station items identified during the April 2017 EPA inspection	--
D.4	Alarm and housekeeping items	Previously Completed
D.6	Bypass quick connect at the Greenbriar lift station	Previously Completed
D.7	Condition-related items at the Farrel lift station	Previously Completed
--	Implement Programmatic Initiatives	--
D.8	Clean all pipes and manholes in a 10-year rotation beginning November 1, 2020, and completed by November 1, 2030	Ongoing (see below)
D.9	Inspect all pipes and manholes in a 10-year rotation beginning November 1, 2020, and completed by November 1, 2030	Ongoing (see below)
D.10	Rehabilitate defective pipes and manholes discovered during the inspection program within 3 years of defect discovery. All rehabilitation must be completed by November 1, 2033.	Ongoing (see below)
E	Develop and implement a Capacity, Management, Operations, and Maintenance Program ("CMOM") Program by May 1, 2020	Ongoing (see below)
F	Submit annual progress reports to EPA	Ongoing; Reports have been submitted for 2020, 2021, 2022, and 2023

LUS submitted its CMOM plan to EPA in February 2020 and has been implementing Collection System Management, Collection System Operations, Collection System Maintenance, and Collection System Capacity Evaluation best practices and procedures to address the requirements of the AO. The CMOM portion of the AO required LUS to begin cleaning and inspection activities by November 1, 2018. Since January 1, 2020, a minimum of 10 percent of all pipes must be inspected every year. In 2022, LUS received clarification from EPA regarding the application of cleaning and inspection in excess of 10 percent from one year to future years.

LUS uses Sewer Line-Rapid Assessment Tool acoustic technology and CCTV to inspect pipes and manholes. Pipe and manhole cleaning is completed in conjunction with inspection activities. LUS prioritizes repairing manholes and pipes using the Point Repair Priority Scores and Definitions and Manhole Repair Priority Scores that were developed as part of the CMOM plan.

LUS must submit annual progress reports to EPA describing actions taken and progress made in complying with AO requirements. A summary of the percentage of pipe and manholes cleaned and inspected is provided in in Table 6-7.

Table 6-7: Cleaning and Inspection Progress (% of System)

	2020	2021	2022	2023
Pipe Inspected	10.5%	11.2%	15.3%	13.5%
Pipe Cleaned	10.7%	11.2%	15.3%	14.6%
Manholes Inspected	17.7%	11.4%	17.0%	15.1%
Manholes Cleaned	Indeterminate [1]	15.8%	15.3%	14.0%

Source of data: LUS Annual Reports to EPA
(1) 2020 Progress Report does not indicate number of manholes cleaned.

After 4 years of the program, as of the conclusion of 2023, 50.5% of all pipes have been inspected, 51.8% of all pipes have been cleaned, 61.2% of all manholes have been inspected, and at least 45.1% of manholes have been cleaned.

LUS was rehabilitating defective pipes and manholes in a prioritized manner prior to issuance of the AO and is now assigning work orders and tracking them to confirm that rehabilitation is completed within 3 years of discovery. Some point repairs and manholes are completed by LUS staff. In other cases, LUS prepares contract packages for manhole rehabilitation/repair, cured-in-place-pipe (CIPP) rehabilitation, and point repair rehabilitation. LUS reported that a total of 14,506 feet of pipe and 600 manholes were repaired or rehabilitated in 2023. This equates to less than 0.5% of the total length of sewers and total number of manholes in the collection system.

LUS has been monitoring its budget for inspection, cleaning, and repair and/or rehabilitation to address the requirements of the AO. LUS expenditures in the early years are being used to inform forecasts of the total cost associated with the entirety of the program.

6.3.1.3 Biosolids and Land Application

LUS's biosolids activities are permitted under LDEQ Sewage Sludge and Biosolids Use or Disposal Permit No. LAJ020125. The current permit became effective on November 1, 2023. Minor changes were noted when comparing the new permit issued in 2023 to the previous permit issued in 2016. The new permit added additional Class B Biosolids pollutant and pathogen testing requirements at all facilities prior to land application once per quarter, and soil sampling and testing at each of the land application sites once per year.

Waste sludge generated at each of the wastewater treatment plants is treated to Class B biosolids standards as defined by 40 CFR Part 503 and dewatered prior to transport to a land application site. Currently, LUS applies biosolids on privately-owned farmland. The right to use such land is secured through land-use agreements which are typically year-to-year leases with a 30-day end-notice.

Due to the nature of land-use agreements, staff cannot always access the sites to apply the biosolids when needed. LUS is required to accommodate farming activities such as crop and livestock rotation, and any needed access during inclement weather. As a result, LUS is required to lease more acreage than is physically necessary for the amount of biosolids produced. A summary of the land leased and used for biosolids application over the past 5 years is presented in Table 6-8.

Table 6-8: Biosolids Application and Land Use

	2019[1]	2020[1]	2021[1]	2022	2023
Total Biosolids Generated (dry tons)	1,796.5	1,803.7	2,062.8	2028.4	1837.8
Total Biosolids Land Applied (dry tons)	1,790.7	1,803.7	2,062.8	2028.4	1837.8
Total Acres Leased	607	607	607	589[2]	589[2]
Total Acres Used	279.5	280.6	320.9	270.5	439

[1] Source of data: LUS MWPP Reports and LDEQ Annual Sewage Sludge Transporter Reporting Form 7362
[2] LUS has total permitted acres of 607 with 18 acres unusable due to other land use agreement with Lafayette Police Department

The volume of biosolids generated at LUS wastewater facilities increased by approximately 32 percent from 2018 to 2021 and was consistent in 2022. From 2022 to 2023, there was approximately a 9 percent drop in the volume of biosolids generated at LUS wastewater facilities. The drop in biosolids production from 2022 to 2023 was noted by the LUS staff due to the operation of the two (2) new digesters at the SSTP. Previously, LUS has expressed concern regarding the availability of land-application sites due to recent land development.

Additional biosolids processing capacity added to the SSTP in 2023 can provide additional flexibility to manage the volume of biosolids produced by the WWTPs. LUS should consider opportunities to expand the access and availability of land application sites or its options for biosolids disposal. Additional land-use agreements should be considered, as well as purchasing and owning land that could be used to apply biosolids. In addition, improving treatment capability to produce Class A biosolids may allow solids to be landfilled, providing another option for biosolids disposal. LUS is planning to evaluate sludge drying technologies in order to produce Class A biosolids.

6.4 Historical Capital Improvement Program

LUS tracks capital expenses through its capital work order system. Historical capital improvement program expenditures shown in Table 6-9 reflect investments in infrastructure funded by the Series 2019 Bonds and retained earnings. Major capital projects in 2023 included sludge handling facilities and equipment, pond clearing, force main replacement, and lift station upgrades.

Table 6-9: Wastewater System Historical CIP

	2019	2020	2021	2022	2023
Wastewater					
Normal Capital & Special Equipment	$1,985,294	$1,619,375	$1,968,227	$1,770,393	$2,003,987
Series 2019 Bonds	128,538	174,992	8,084,550	7,787,204	3,436,699
Retained Earnings	5,247,716	4,298,097	4,129,321	4,309,486	4,561,872
Total Wastewater Capital	$7,361,548	$6,092,464	$14,182,098	$13,867,084	$10,002,558

Source of data: LUS Financial and Operating Statements and Utilities Status of Work Orders Report

6.4.1 Grant Funding

LUS has been awarded grants through the USEPA and Louisiana Water Sector program totaling over $16.4 million. Funds from the Louisiana Water Sector are from the American Rescue Plan Act (ARPA) and will be used for wastewater improvements projects and various sewer lift station projects, and collection system repairs, while the grants provided from the USEPA will be used for the South Gravity Sewer Upgrade in Downtown Lafayette. The allocated grants will fund the projects described below:

1. South Sewer Plant Digester Rehabilitation
    a. Design and construction of digester rehabilitation improvements to improve capacity and effectiveness due to sludge accumulation and deterioration/corrosion in the basins.
    b. Maintain treatment of sewage sludge to Class B standards in accordance with existing sludge disposal permits.
2. South Sewer Plant Flow Handling Improvements
    a. Design and construction of additional chlorination and headworks facilities.
    b. Increase capacity to accept additional flow and peak rates associated with the Downtown Sewer Upgrades and treatment plant consolidation.
    c. Eliminates need for sewer treatment at University of Louisiana at Lafayette.
    d. Handle surges of wastewater flow during wet weather periods to minimize overflow violations.
    e. Allows for additional flows to be diverted from the ACTP.
3. South Sewer Plant Metal Roof Replacements

   a. Replacement of roof on training room building, maintenance building, and chlorine storage building.
4. Acacia Lift Station Backup Power
   a. Provide generator for emergency back-up power at lift station during power outages.
   b. Minimize sewer permit violations due to power outages.
5. Ambassador Caffery Treatment Plant
   a. South Meyers Force Main Reroute project to eliminate deteriorating discharge point and discharge into larger capacity sewer line on Kaliste Saloom.
   b. Elen Lift Station and Force Main installation to serve existing subdivision and future growth in area.
   c. Verot Lift Station Backup Power project for emergency back-up power at lift station during power outages.
6. Northeast Treatment Plant
   a. Pont Des Mouton Force Main Reroute underneath I-49 overpass to eliminate double pumping and increase lift station capacity.
   b. Rehabilitation of clarifier and headworks piping and replacement of sludge holding tank to increase capacity for future growth.
   c. Brown Park Lift Station Backup Power project for emergency back-up power at lift station during power outages.
7. East Sewer Treatment Plant
   a. Sludge Digester Rehabilitation to repair collapsed roof and replacement of boiler in sludge treatment facility.
   b. Beaver Park Lift Station Backup Power project for emergency back-up power at lift station during power outages.
8. South Gravity Sewer Upgrade
   a. Construction of new lift station to provide additional 2,000-gpm pumping capacity to the Downtown Lafayette and university areas to allow for growth and development.
   b. Installation of new force main to convey wastewater to the SSTP.
   c. Upsize gravity collection lines to the lift station.

6.5 Environmental and Regulatory Compliance

In accordance with each facility’s LPDES permit, LUS is required to file an Annual Municipal Water Pollution Prevention audit report for each operating facility. Sometimes, LUS exceeds the design/permitted flow rating at its wastewater treatment plants. At other times, permitted effluent biological exceedances occur at the WWTPs. The number of months during which the permitted influent flow or effluent discharge limitations of each plant was exceeded over the past 5 years is summarized in Table 6-10.

Table 6-10: Total Monthly Occurrences of Design or Permitted Rating Exceedances

Wastewater Treatment Plant	2019	2020	2021	2022	2023
Permitted Influent Flow Exceedances					
South Sewage	0	0	1	1	1
East Sewage	0	0	3	1	2
Ambassador Caffery	6	5	7	1	2
Northeast	0	0	2	0	0
Permitted Effluent Discharge Limitation Exceedances					
South Sewage	0	0	0	0	0
East Sewage	0	0	0	1	0
Ambassador Caffery	0	0	0	0	0
Northeast	0	0	1	2	1

Source: LUS MWPP Reports

LUS received a variety of correspondence from regulatory agencies in 2023 related to wastewater compliance:

- In June 2023, the SSTP was visited by LDEQ. LDEQ subsequently issued a Field Interview Form and a Compliance Inspection Report noting a Satisfactory rating with no actionable recommendations.

- In September 2023, the ACTP was visited by LDEQ and EPA. LDEQ subsequently issued a Field Interview Form and a Compliance Inspection Report noting a Satisfactory rating with no actionable recommendations. No documentation has been received from EPA.

LDEQ also requires LUS to report the number of sanitary sewer overflows and bypasses that occur in the Annual Municipal Water Pollution Prevention audit reports. The total number of sanitary sewer overflows and bypasses that occurred at the WWTP or within the collection system basin over the past 5 years is summarized in Table 6-11. In 2022, sanitary sewer overflows were considerably less than in previous years which LUS believes was primarily due to drought conditions producing less rainfall. In 2023, the number of sanitary sewer overflows increased from 2022.

Table 6-11: Total Sanitary Sewer Overflows and Bypasses

Wastewater Treatment Plant	2019	2020	2021	2022	2023
South Sewage	39	59	50	21	34
East Sewage	17	13	12	5	21
Ambassador Caffery	31	7	23	3	0
Northeast	0	1	3	5	4
Total	87	80	88	34	59

Source of data: LUS MWPP Reports

6.5.1 Spill Prevention Control and Countermeasures

SPCC plans are required to comply with state and federal regulations if facilities are proximate to U.S. waters. Compliance is required by facilities which are subject to spills of oils, fuels, or other controlled substances and have a storage capacity of more than 1,320 gallons at a single facility. SPCC plans were prepared and implemented in accordance with these regulations for each wastewater treatment facility. SPCC Plans must be reviewed every five (5) years (the last review occurred in 2022) or upon significant change in oil storage or if a spill incident occurs.

6.5.2 Wastewater Pretreatment Program

Federal regulation requires that LUS maintain a wastewater pretreatment program that is applicable to certain customers discharging to the LUS collection system, with particular emphasis on industrial users. Industrial users are identified by review of the North American Industry Classification System (“NAICS”) code of the user. The program is overseen and enforced by the LUS Environmental Compliance Division; and was established to accomplish the following objectives:

1. Prevent pollutant discharges which will interfere with operations of publicly owned treatment works (“POTWs”), including the use or disposal of municipal sludge (i.e., biosolids),
2. Prevent pollutant discharges which the POTW is not designed to remove by treatment,
3. Reduce the risk of exposing workers to hazardous chemicals, and
4. Improve opportunities to recycle and reclaim industrial wastewater and sludges.

Significant Industrial User Permits are issued to any customer that discharges an average of 25,000 gallons or more of process wastewater. Seven (7) customers have been issued this permit because they either contribute process waste stream that make up 5 percent or more of the average dry-weather hydraulic or organic capacity of the treatment plant or have a reasonable potential for adversely affecting the treatment facility’s operation for violating any pretreatment standard or requirement. A total of seven (7) Categorical Zero Discharge Permits have been issued to customers that do not discharge any process wastewater in accordance with CWA section 307.

LUS must submit an Annual Pretreatment Report to LDEQ as part of the requirements under its LPDES permits. LUS reported zero (0) instances of significant noncompliance by Significant Industrial Users and zero (0) enforcement actions taken in the 2023 Annual Pretreatment Report.

6.5.3 Flow and Biological Loading

The wastewater strength to the LUS WWTPs is characterized as primarily domestic wastewater, with relatively little industrial wastewater. LUS operators have indicated that the wastewater influent is consistent between the WWTPs. Influent wastewater characterization generally contains approximately 25 mg/L of total nitrogen, 180-300 mg/L of 5-day carbonaceous BOD5, and 30 to 40 mg/L TSS.

Publicly owned treatment works serving the City of Lafayette are subject to regulatory limitations of wastewater discharges to the Vermillion River and Bayou St. Claire. The wastewater discharge limitations are established by the LPDES permit, which has assigned a permit limit and specific discharge loading limits for each of the LUS WWTPs. Although the concentrations (mg/L) limits of each contaminant are consistent between the WWTPs, the loading rate (lbs/day) which accounts for variability in influent flow, varies for each facility. The average monthly discharge limitations are summarized in Table 6-12.

Table 6-12: Wastewater Treatment Plant Average Monthly Discharge Limitations

	South	East	Ambassador Caffery	Northeast
LPDES Permit	LA0036374	LA0036382	LA0042561	LA0036391
Permitted Design Flow	7.0 MGD	4.0 MGD	6.0 MGD	1.5 MGD
BOD_5 – May through December	584 lbs/day 10 mg/L	334 lbs/day 10 mg/L	500 lbs/day 10 mg/L	125 lbs/day 10 mg/L
BOD_5 – January through April	1168 lbs/day 20 mg/L	667 lbs/day 20 mg/L	1,000 lbs/day 20 mg/L	250 lbs/day 20 mg/L
Total Ammonia-Nitrogen (as N) May through December	292 lbs/day 5 mg/L	167 lbs/day 5 mg/L	250 lbs/day 5 mg/L	63 lbs/day 5 mg/L
Total Ammonia-Nitrogen (as N) January through April	584 lbs/day 10 mg/L	334 lbs/day 10 mg/L	500 lbs/day 10 mg/L	125 lbs/day 10 mg/L
Total Nitrogen (as N)	Monitoring Only	Monitoring Only	Monitoring Only	Monitoring Only
Cyanide	--	--	--	Monitoring and Reporting Only
TSS – May through December	876 lbs/day 15 mg/L	500 lbs/day 15 mg/L	751 lbs/day 15 mg/L	188 lbs/day 15 mg/L
TSS – January through April	1168 lbs/day 20 mg/L	667 lbs/day 20 mg/L	1,000 lbs/day 20 mg/L	250 lbs/day 20 mg/L
Total Phosphorus (as P)	Monitoring Only	Monitoring Only	Monitoring Only	Monitoring Only

The LDEQ has imposed a hold on new (additional) contaminant loading to the Vermillion River due to agriculture, waste flows from unincorporated areas, and waste flows from publicly owned treatment works. As the City continues to develop and grow, this contaminant loading restriction requires that the lbs/day limit by LDEQ is met by the LUS WWTPs, regardless of influent flow increases.

6.5.4 Severe Weather Events

LUS reported that the wastewater utility was not materially affected by severe weather events in 2023.

6.6 Contracts and Agreements

LUS is currently under contract in the Grossie Avenue area for wastewater O&M. This area included a small number of customers served by a separately owned wastewater collection system where the flows from the approximately 50 customers are treated at the ESTP. The 40-year agreement was executed in 1995 and expires August 2035.

6.7 Utility Benchmarking

6.7.1 Utility Rates

Residential and commercial wastewater rates implemented by LUS are comparable to and competitive with utilities benchmarked in the state and surrounding region. Table 6-13 and Table 6-14 provide a regional comparison of effective wastewater rates for residential and commercial customers, respectively.

Table 6-13: Residential Rate Comparison

Sewer

Utility	Average ($/1,000 gallons) (1)
Alexandria	$ 3.86
Lake Charles	$ 4.66
New Iberia	$ 7.02
Baton Rouge	$ 7.30
LUS	$ 7.73
Shreveport	$ 11.35
New Orleans	$ 12.42

Source: LUS. Rates as of November 1, 2022.
(1) Assumes monthly water consumption of 7,000 gallons.

Table 6-14: Commercial Rate Comparison

Utility	Average ($/1,000 gallons) [1]
Alexandria	$ 3.59
Lake Charles	$ 4.17
Baton Rouge	$ 6.60
New Iberia	$ 8.09
LUS	$ 7.42
New Orleans	$ 13.18
Shreveport	$ 10.26

Source: Burns & McDonnell. Rates as of November 1, 2022.
Assumes monthly water consumption of 30,000 gallons.

Burns & McDonnell completed a wastewater rate study in FY 2022 proposing 9.5 percent increases in FY 2023, FY 2024, and FY 2025. The new wastewater rates for FY 2023 were put in service on November 1, 2022. In 2023 LUS contracted Burns and McDonell to update the rate study through FY 2028. The updated study maintained the 9.5 percent increases through FY 2025 and proposed 5 percent increases in FY 2027 and FY 2028. LUS has not yet requested City council for approval for the FY 2027 and FY 2028 wastewater rate increases.

6.7.2 Financial and Operating Statistics

The AWWA annually publishes benchmarking data across a variety of performance indicators for water and wastewater utilities. The *2023 AWWA Utility Benchmarking: Performance Management for Water and Wastewater* was released in early 2024, compiling various financial and operating ratios from 2022. For this analysis, specific ratios were obtained from the AWWA report representing national and regional medians. The AWWA defines national metrics as wastewater utilities in both the United States and Canada, hereafter referred to as “National.” Ratios are also available by region and by number of wastewater customers served. The U.S. South region was used, which includes Louisiana and is hereafter referred to as “Regional.” Further, ratios are available specifically for water utilities, wastewater utilities, and combined water and wastewater utilities. Where possible, comparisons have been made to wastewater utility ratios. However, some LUS balance sheet information is available only for the combined Electric, Water and Wastewater Utilities System, hereafter referred to as “Combined.” The AWWA “Combined” benchmarking data only includes water and wastewater utilities.

The benchmark results are presented in Table 6-15. LUS’s wastewater operational costs are lower than the National median but higher than the Regional median. LUS’s combined debt ratio is lower than the Regional and National median. The operating ratio is higher on both a wastewater-only and combined basis than either the National or Regional medians. However, the AWWA combined utilities median includes water, wastewater, and storm water, while LUS includes water, wastewater, and electric. LUS's cash reserves are lower than the National and Regional medians. LUS's 2023 wastewater debt service coverage is higher than the Regional but lower than the National median. The combined debt service coverage is higher than the Regional and National median and remain at a strong position.

Table 6-15: Benchmarked Wastewater Utility Operating Ratios

Statistics	Basis	National[(1)] 2022	Regional 2022	LUS 2022	LUS 2023
Operational Costs per MG	Wastewater	$4,152	$2,679	$4,086	$3,939
Debt to Total Assets (Debt Ratio)	Combined	0.32	0.49	0.32	0.29
Operating Ratio (O&M cost/ Operating revenue)	Wastewater	0.48	0.50	0.66	0.61
Operating Ratio (O&M cost/ Operating revenue)	Combined	0.46	0.50	0.74	0.69
Cash Reserve Days[(2)]	Combined	334	374	61	51
Debt Service Coverage	Wastewater	2.03	3.38	2.08	2.84
Debt Service Coverage	Combined	2.29	2.20	3.29	3.83

Source: AWWA and LUS
(1) National AWWA benchmarks for water and combined water and wastewater utilities with 50,001 to 100,000 customers to align with the Water System customers served.
(2) LUS results based on total O&M for Electric, Water, and Wastewater Systems less fuel and purchased power expenses.

6.8 Historical Financial Performance

Table 6-16 presents historical debt service and the associated DSCR. Historical Wastewater System debt service as shown below includes a portion of the Series 2012 Bonds, Series 2017 Bonds, Series 2019 Bonds, and Series 2021 Bonds. The Series 2010 Bonds were fully redeemed by the proceeds of the Series 2017 Bonds on November 1, 2020. The Series 2012 Bonds were fully refunded by the proceeds of the Series 2021 Bonds in FY 2022. In each year since 2019, the DSCR exceeded the minimum coverage requirement of 1.0 required by the Bond Ordinances.

Table 6-16: Historical Financial Performance

Fiscal Year	Operating Revenues [(1)]	Operating Expenses [(2)]	Net Revenues Available for Debt Service	Debt Service [(3)]	Debt Service Coverage Ratio
2019	$32,038,772	$19,211,514	$12,827,259	$4,218,291	3.0
2020	$31,122,710	$18,295,187	$12,827,523	$5,842,264	2.2
2021	$31,768,322	$19,791,589	$11,976,733	$5,786,152	2.1
2022	$32,248,543	$20,606,263	$11,642,280	$5,607,718	2.1
2023	$36,834,918	$20,924,121	$15,910,798	$5,597,990	2.8

Source: LUS Financial and Operating Statements
(1) Operating Revenues include interest income and other miscellaneous income.
(2) Operating Expenses include O&M and other expenses such as customer service and A&G costs. Operating Expenses do not include ILOT, normal capital and special equipment, and other miscellaneous expenses.
(3) Debt service was prepared on a cash basis for this table and includes a portion of the Series 2010 Bonds, Series 2012 Bonds, Series 2017 Bonds, Series 2019 Bonds, and Series 2021 Bonds. The Series 2010 Bonds were fully redeemed by the proceeds of the Series 2017 Bonds on November 1, 2020. The Series 2012 Bonds were fully refunded with the Series 2021 Bonds in FY 2022.

6.8.1 Rate Structures

The Wastewater System provides service to retail customers both inside and outside the City limits. Wastewater System customer classes for ratemaking purposes include residential and commercial. The Wastewater System rate structure includes a customer charge based on class and a commodity charge applied to billed volume. The determination of billed volume varies by season. During December through March, customers are billed for actual water use. For the remaining months of the year, usage is generally calculated using the average usage of the four preceding winter months (December through March). However, billed volume may not be less than 75 percent of actual water consumption in each of those months. LUS can adjust billed volume as needed to stay at or above the 75 percent threshold. Burns and McDonnell was contracted to perform a rate study for the water utility in FY 2022. The rate study proposed 9.5 percent increases per year from FY 2023 through FY 2025 which was adopted. New rates for FY 2023 were implemented on November 1, 2022. Table 6-17 presents the rate schedule for LUS in FY 2023.

Table 6-17: Rate Schedules

Rate Class	Serves	Effective Date	Customer Charge ($/month)	Monthly Volumetric Charge ($/1,000 gallons)
S-1	Residential	Nov 2022	$9.42	$6.38
S-1-O	Residential Non-City	Nov 2022	$11.28	$7.68
S-2	Commercial	Nov 2022	$16.15	$6.38
S-2-O	Commercial Non-City	Nov 2022	$26.49	$8.22

Source: LUS FY 2023 Rate Schedules

Burns & McDonnell was contracted in FY 2023 to perform a rate study update which proposed rate increases of 5 percent per year in FY 2027 and FY 2028. LUS has not yet requested City council for approval for the FY 2027 and FY 2028 wastewater rate increases.

6.8.2 Revenue Analysis

Table 6-18 presents the Wastewater System retail rate revenues. In total, 2023 revenues increased by 10.7 percent. All classes' revenues increased in FY 2023 mainly due to rate increases. Customer counts have increased on average 1.0 percent per year from 2019 to 2023 while revenue per customer increased overall by 9.2 percent in FY 2023 compared to FY 2022.

Table 6-18: Retail Revenues by Class

	2019	2020	2021	2022	2023
Revenues					
Residential	$16,620,065	$17,069,978	$16,810,848	$17,248,790	$19,485,285
Commercial	11,804,385	11,552,556	11,934,206	12,202,780	13,034,316
Schools & Churches	1,316,766	1,092,977	1,201,994	1,353,928	1,632,409
Other	169,456	145,715	172,721	225,672	205,677
Total	$29,910,672	$29,861,226	$30,119,770	$31,031,170	$34,357,687
Number of Customers					
Residential	39,791	40,237	40,760	40,815	41,381
Commercial	5,442	5,503	5,523	5,575	5,651
Schools & Churches	275	282	287	290	302
Other	115	111	111	111	112
Total	45,623	46,133	46,681	46,792	47,446
Revenue per Customer					
Residential	$418	$424	$412	$423	$471
Commercial	2,169	2,099	2,161	2,189	2,307
Schools & Churches	4,781	3,876	4,184	4,673	5,404
Other	1,479	1,309	1,560	2,025	1,842
Total	$656	$647	$645	$663	$724

Source: LUS Financial and Operating Statements

6.8.3 Expense Analysis

Table 6-19 presents historical wastewater operating expenses, distinguished between fixed and variable costs. Variable operating expenses within Collection include purchased power costs, while variable operating expenses within Treatment include chemical costs. Fixed operating expenses include the remaining portions of Collection and Treatment expenses, plus Customer Service and A&G expenses. Historically, variable expenses average about 9 percent of total expenses, with the remaining 91 percent pertaining to fixed expenses. In the last couple years, the variable expenses have increased relative to the fixed expenses which is primarily attributed to inflationary pressures in variable cost categories.

Table 6-19: Historical Fixed and Variable Expense Summary

	2019	2020	2021	2022	2023
Variable Expenses					
Collection	$372,159	$354,468	$399,174	$399,976	$358,021
Treatment	1,249,620	1,163,932	1,225,823	1,688,557	1,722,479
Total Variable Expenses	$1,621,779	$1,518,400	$1,624,997	$2,088,533	$2,080,499
Fixed Expenses					
Collection	$4,940,592	$4,534,054	$5,098,653	$4,829,497	$4,192,292
Treatment	5,737,501	5,089,896	5,481,952	5,241,381	5,984,105
Customer	1,365,016	1,318,028	1,655,511	2,181,031	2,031,487
A&G	5,546,626	5,834,810	5,930,475	6,265,821	6,635,737
Total Fixed Expenses	$17,589,735	$16,776,788	$18,166,592	$18,517,730	$18,843,621
Total Fixed & Variable	$19,211,514	$18,295,187	$19,791,589	$20,606,263	$20,924,121
Percent Variable	8%	8%	8%	10%	10%
Percent Fixed	92%	92%	92%	90%	90%

Source: LUS Financial and Operating Statements

6.8.4 Recovery of Costs

Comparable to the Water System, Wastewater System revenues are also affected by weather, economic conditions, and in 2020 and 2021, the COVID-19 pandemic. Volatility of water demand caused by these dynamics can impact the stability of revenues. As shown in Table 6-19, expenses are largely fixed and are generally not as susceptible to weather or economic variances. Regardless of the underlying cause, the predominately fixed-cost nature of the Wastewater System cost structure and the variable nature of its revenue stream can put pressure on utility cash flows when demand is disrupted. The mismatch between a high fixed cost structure and a high variable cost revenue stream is a common challenge in the wastewater utility industry.

6.9 Observations and Recommendations

Based on the analysis described herein, Burns & McDonnell offers the following observations and recommendations.

- Based on visual inspection of facilities, review of records, and interviews of LUS staff, the LUS wastewater treatment facilities are in good condition, maintained properly and in accordance with industry practices.
- The organizational structure, management, and employee retention of the wastewater system engineering and operations areas appears to be strong based on initial observations, interviews, organizational structures, and manpower within each department.

- As mentioned previously in the electric utility system findings, all LUS departments are having challenges attracting and retaining staff due to lower than market labor rates and a competitive labor market. LUS should act immediately to remedy this as recommended previously.
- LUS staff have indicated that 2023 was a relatively dry year. Wastewater flow treated in 2023 was 5 percent more than 2020; however, sanitary sewer overflows increased from 2022 to 2023 but were less than the 5-year rolling average. LUS efforts to clean and rehabilitate its sanitary sewer system as part of its AO are likely contributing to the reduced number of sanitary sewer overflows observed over time.
- Implementation of preventative maintenance procedures in recent years has been noted by LUS staff to be beneficial at limiting downtime and emergency repair costs.
- LUS completed a rate study in FY 2022 and the proposed rate plan was approved. The adopted rate increases which were effective starting November 1, 2022 are generating revenues that allow LUS to continue to maintain its financial performance. LUS completed another rate study in FY 2023 which proposed additional 5 percent rate increases in FY 2027 and FY 2028. LUS has not yet requested City council for approval for the FY 2027 and FY 2028 wastewater rate increases.
- The Water Sector Program was created in 2021 by the State of Louisiana to provide grant funding for repairs, improvements and consolidation of community water and sewer systems around the state. $300 million from the American Rescue Plan Act was provided to the program. LUS submitted applications to the program in late 2021. In January 2022, LUS was notified that it was awarded a total of approximately $4.83 million in grant funding for three (3) wastewater treatment plant areas (ACTP – 5 projects, NETP – 5 projects, and ESTP – 3 projects) as part of Round 1 of the program. LUS was notified in December 2022 that for FY 2023, it was awarded a total of approximately $6.6 million in grant funding for additional wastewater projects at the South Sewerage Treatment Plant Area, $2 million in grant funding for wastewater projects at the ACTP, NETP, and ESTP for facility improvements, and lastly $2.8 million in grant funding for collection system improvements.
- Additional funding of $5 million was awarded to LUS by the USEPA for the South Gravity Sewer Upgrade consisting of the installation of a new lift station and nearly three miles of force main from the downtown area. This project will help to alleviate sewer backups in the downtown area that have hindered further development.
- LUS issued new bonds in the beginning of FY 2024 to support various electric, water, and wastewater projects. Based on the financial projections contained in the continuing disclosure, LUS is expected to generate revenue needed to cover the incremental debt service expense from the new bonds.

- LUS currently has agreements for access to areas totaling more than the area physically required to contain all produced biosolids. The additional area under lease is necessary because the land-use agreements require LUS to accommodate farming activities, which reduces the availability of these spaces. LUS may consider evaluating new, or restructured, land-use agreements to provide better availability of land or flexibility for the application of biosolids to potentially reduce costs.
- LUS could consider improvements at its WWTPs to allow for production of Class A biosolids. This transition could provide additional flexibility for biosolids disposal, which could help limit the reported challenges with the availability of land application sites. LUS has identified a sludge drying project in its CIP. LUS could consider completing a preliminary engineering study to evaluate the scope, costs, and feasibility of this project.
- LUS could consider evaluating a mechanical dewatering process at the NETP to remove excess water prior to lime stabilization. This WWTP generates biosolids at approximately 2 to 3 percent solids by weight, and the other three WWTPs produce biosolids at approximately 22 to 27 percent solids by weight after processing with mechanical equipment. This could also alleviate some challenges with the frequency of land application. This initiative may be a lower priority item given that recent improvements at the SSTP provide capacity for liquid sludge from the NETP to be hauled to the SSTP for dewatering.
- Due to regional contaminant loading to the Vermillion River, the LDEQ has imposed a hold on new and additional contaminant loading to the river. Simultaneously, population growth and development within the LUS service area has increased, and therefore wastewater flows to the LUS WWTPs have also increased. As a confluence of these factors, LUS should consider a treatment process evaluation of the four WWTPs be completed to identify the risks that LUS faces with respect to meeting LPDES loading limits and improvements which may reduce LUS loading to the river. The evaluation should specifically consider long-term capacity needs of the LUS wastewater utility and future permit limits, including consideration of nutrient reduction requirements. LUS initiated discussions about the scope of such evaluations in 2023.
- LUS is well organized and structured in its approach to implementing its CMOM program and addressing the requirements of the AO. LUS has leveraged its in-house staff and contractor resources to complete work efficiently. It is important that cleaning, inspection, and rehabilitation of the wastewater collection system be continued to comply with the requirements of the AO. The rate of such work needs to continue meeting the required 10 percent per year. LUS exceeded this requirement in 2020, 2021, 2022, and 2023. LUS is on track or ahead of the compliance schedule for sewer and manhole repair work stipulated in the AO.

- LUS is in the first half of the total compliance period for addressing the sewer cleaning and inspection requirements under the AO. LUS should continue closely tracking and monitoring costs incurred to date and use that data to consider a range of scenarios that can be used to inform long-term decision making regarding the total cost of compliance and funding needs.
- The CMOM program implemented in response to the AO has established a framework for programmatic proactive maintenance of LUS's collection system assets. Proactive maintenance can result in extended asset life and potentially reduce the likelihood and duration of unexpected downtime or failures. Less than 0.5% of total sewers and manholes in the system were rehabilitated in 2023. To further efforts to implement its CMOM program, LUS could consider implementing a risk-based approach to further develop capital improvement planning strategies to prioritize renewal and replacement of aging infrastructure over its anticipated service life.
- Due to the need to plan for ongoing development throughout its service area, LUS began a Wastewater Master Plan focused on the collection system in 2023. The master plan effort includes flow metering, development of a wastewater collection system hydraulic model, evaluation of capacity restrictions, and identification of long-term collection system capacity improvements.

7.0 COMMUNICATIONS SYSTEM

7.1 Communication System Summary

LUS Fiber (“LUS Fiber”) began in 1998 with LUS building fiber to serve the Electric System’s SCADA system, transmission line protection systems, and LUS facilities. Further expansion of the system allowed LUS to offer wholesale communications and data services to governmental and educational facilities, and retail data, telephone, and cable TV services to the public. The first retail customers began receiving service in February 2009.

In preparation for providing retail communications services, LUS Fiber purchased the fiber optic system from the Utilities System in 2007. LUS Fiber utilized internal loans from the Utilities System to fund the purchase of the fiber system assets, startup costs, and operating costs. LUS Fiber does not expect any future loans from the Utilities System. LUS Fiber repayment of the loans will continue through 2033. The repayment of the Utilities System loans is subordinate to the payment of debt service on LUS Fiber bonds.

Taking advantage of low interest rates, LUS Fiber refinanced their bond debt which will provide additional capital to fund network expansion efforts. In 2021, LUS Fiber refunded the City of Lafayette, State of Louisiana Communications System Revenue Refunding Bonds, Series 2021A (Tax-Exempt) and Taxable Communications System Revenue Refunding Bonds, Series 2021B (Federally Taxable) in the principal amount of $14,140,000. The total LUS Fiber savings from Series 2021 Bond Refunding is $2.7 million.

LUS Fiber is comprised of a [redacted] mile fiber backbone system with direct connections to national Tier 1 broadband providers, [redacted] miles of distribution fiber, and [redacted] miles of access fiber [redacted] percent increase from last year) connecting to individual premise locations. About [redacted] percent of the infrastructure is on aerial utility poles and [redacted] percent is underground. LUS Fiber reports that it has constructed on average [redacted] miles of new infrastructure per month in the past year, mostly underground.

The system is a centralized split, fiber-to-the-premises (“FTTP”) architecture, with fiber located throughout the service area. Relative to the copper telephone and cable broadband technologies used by its competitors, LUS Fiber uses a passive optical network (“PON”) technology that is well-suited to all residential and all but the most intensive commercial and institutional uses. For these large enterprise customers, LUS Fiber has customized solutions such as dark fiber and direct connect capabilities. FTTP has many times the theoretical maximum capacity of other technologies and can be scaled to much higher speeds and bandwidth in the coming years simply by changing modules in the network headend and huts, and by upgrading the network terminal at the home or business.

LUS Fiber cables are installed both on aerial poles and underground, based usually on the location of the other utilities. Where fiber is on aerial poles owned by LUS electric, it is placed in the power space “safety zone” that is restricted to LUS electric, thus taking advantage of the open space above the other communications providers, while safely constructed and managed by individuals qualified to work within high voltages. Where LUS Fiber cables are on poles owned by a different utility, they are currently located in the communication space located below the power space away from the high voltage lines. LUS Fiber staff continue to work with these utilities to allow LUS Fiber to locate their cables in the safety space through joint-use attachment agreements.

Based on a sample drive-through inspection of the system, the aerial infrastructure appears to be well maintained.

7.1.1 Backbone Architecture

The headend has [redacted] satellite dishes and [redacted] tower for of air reception of local TV networks. These dishes enable high-definition (HD) television channels for customers. There are [redacted] power inputs to the headend building for redundancy. There is also a battery backup to maintain the network until the power can be switched to the secondary power source if an outage interrupts the primary power source. However, one strand of batteries is currently planned to be replaced within Q2 of 2024 as they have reached their end of life and are needing to be replaced. There is also a backup generator that is tested once a week. The equipment in the headend appears to be well maintained, and cabling is kept in an orderly fashion.

As of the end of FY 2023, there are [redacted] huts connected over backbone fiber to the headend. All [redacted] of these huts are equipped with [redacted] and can serve up to [redacted] subscribers each. [redacted] of these huts were upgraded in 2023 to be able to serve up to [redacted] subscribers each and additional [redacted] huts are planned to be turned up by the end of FY 2024. There are [redacted] power inputs to each hut for redundancy. There is also a battery backup and a generator plug at each hut.

The equipment in the headend and the huts continually undergoes scheduled replacements and upgrades. The core network routers are [redacted] located at the headend and hut locations, feeding [redacted] separate networks. [redacted]

[redacted]

[redacted]

7.1.2 Customers

Since 2019, LUS Fiber number of accounts increased at a compound annual rate of [redacted] percent, totaling [redacted] retail accounts by end of 2023. The historical number of accounts and market share has consistently increased as presented in Table 7-1.

Table 7-1: Communications System Market Share (Confidential)

Fiscal Year	Number of Customer Accounts	Increase in Customer Accounts (%)	LUS Fiber Total Passings	Increase in LUS Fiber Passings (%)	LUS Target Market Share
2019	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2020					
2021					
2022					
2023					

Source: LUS Fiber

LUS Fiber's marketing activities focus primarily on single family residence and business customers located within its service footprint. Customers meeting this profile enable LUS Fiber to provide communication services with minimal additional cost. For the purposes of understanding LUS Fiber's share of the LUS Fiber target market, LUS Fiber customer projections are compared with a subset of LUS Electric System customers along with customers outside the LUS Electric System service territory. Roughly [redacted] percent of LUS Fiber's residential customers live in single-family units, including duplexes and fourplexes. [redacted]

Currently, LUS Fiber [redacted] offers service in [redacted] large multi-dwelling-unit ("MDU") complexes with [redacted] to [redacted] residences. [redacted]

[redacted]

LUS Fiber also offers services to both single-tenant and multi-tenant commercial properties and has just over [redacted] business customers.

7.1.3 Service Offerings

In the retail market, the LUS Fiber offers “triple play” services. “Triple play” is a common term in the industry that refers to cable TV, internet, and telephone services. LUS Fiber provides services to approximately [redacted] customers, who can choose to purchase any, or all, of the triple-play services. These services are in competition with regional and national data, and communications providers including Cox Communications, Dish, AT&T, Dish, Kaptel, REACH4, and HughesNet.

The following residential retail services are available to customers:

1. Residential Cable Television / Video Services
    a. 87 analog, 327 digital channels
    b. Traditional Video Packages
        i. Basic Package with 21 channels
        ii. Expanded Basic with 84 channels
        iii. Digital Access with 192 digital channels
        iv. Digital Plus with 278 digital channels
        v. Digital Hispanic with 278 digital channels, including 7 Spanish-only channels
        vi. Premium Movie Suites (HBO, HBO Max, Cinemax, Showtime & TMC, Starz/Encore, MGM+)
    c. Additional equipment and service options include whole home digital video recorder (“DVR”), video on demand, pay-per-view, and set top boxes.
2. ConnecTV Packages
    a. ConnecTV Basic with 20 channels

   b. ConnecTV Expanded with 135 channels and 150 Mbps down/up
   c. ConnecTV Plus with 189 channels and 300 Mbps down/up
   d. ConnecTV Elite with 189 channels and 1 Gbps down/up
   e. Sports Package with 25 channels
   f. Hispanic Package with 8 channels
   g. Premium Movie Suites (HBO, HBO Max, Cinemax, Showtime & TMC, Starz, Encore, MGM+)
   h. Premiums Bundle with 40 premium channels
3. FiberTV Packages
   a. Basic with 21 channels
   b. Expanded with 84 channels and 100 Mbps down/up
   c. Access with 192 channels and 100 Mbps down/up
   d. Advanced with 192 channels and 300 Mbps down/up
   e. Plus with 278 channels and 300 Mbps down/up
   f. Max with 278 channels and 1 Gbps down/up
   g. Digital Hispanic with 283 channels
4. Residential Internet Service
   a. 3, 60, 100, 150, 300, 350 megabits per second ("Mbps")
   b. 1 and 10 gigabit per second ("Gbps")
   c. Hub City Wi-Fi – residential Wi-Fi service
   d. Hub City Wi-Fi Plus – residential Wi-Fi service
5. Residential Telephone Service
   a. Basic Line – basic digital telephone service line with paid long-distance calling; packages and features are sold separately
   b. Basic Feature Package – automatic call back, automatic recall, various call forwarding, do not disturb, outgoing call blocking, selective call rejection, selective call acceptance, speed dialing
   c. Premium Feature Package – basic service, plus voicemail, caller identification, call waiting caller identification
   d. Unlimited Long Distance – offered as a separate service to add to the above services
   e. International Long Distance – per minute rate depending on the area called
   f. Additional available features – call forwarding busy, call forwarding do not answer, toll control with pin, teen line, warm line, Local Access and Transport Area (LATA) access fee, 800 service, directory assistance, directory listings

In addition to the residential retail communications services, LUS Fiber offers the following business retail services to customers:

6. Business Internet Service
    a. 10, 25, 100 Mbps
    b. 1, 2, 10 Gbps
7. Business Video Service
    a. 87 analog, 278 digital channels
    b. Traditional Video Packages (same as residential service offerings)
8. Business Telephone Service
    a. Business Phone Line – includes anonymous call rejection, automatic callback, automatic recall, busy call forwarding, call blocking, hold, transfers, call waiting, calling name/number delivery/blocking, delayed call forwarding, selective call acceptance, rollover group, selective call forwarding/rejection, speed calling, three-way calling, telephone user interface commands, immediate forwarding, and voicemail.
    b. Business Phone Line Enhanced – includes incoming call manager, sequential ring, priority call, time of day/day of week routing, individual contact management, call screening and remote office services.
    c. Hosted voice (“HPBX”)
    d. Primary Rate Interface (“PRI”)
    e. Conference Calling, Unlimited Long Distance, E-Fax, Auto-Attendant – offered as separate services to add to the above services.

LUS Fiber is the only provider in Lafayette offering 10Gbps broadband internet to residential customers. As of April 2024 the federal government’s Affordable Connectivity Program (“ACP”) has exhausted its funding requiring that customers pay to offer lower cost broadband to qualified households to help mitigate the digital divide.

The sale of internet services exhibits the highest growth for LUS Fiber, while cable TV service and telephone service sales are more variable. Although the number of cable TV and telephone subscribers has remained relatively stable over the last few years, growth has not kept pace with overall customer growth. LUS Fiber continues to see the transition of the use of over-the-top video and voice over Internet Protocol (“VoIP”) telephone services and anticipates that the total number of cable TV and telephone subscribers will continue to gradually decline. It is difficult to directly compare specific cable TV, internet, and telephone service offerings across all competitors in the market as each competitor bundles packages, services, and offerings differently.

7.1.4 Wholesale Contracts

LUS Fiber has contracts with [redacted] LUS Fiber has several wholesale contracts with major carriers, internet service providers ("ISP"), and application service providers, who in turn provide bandwidth, internet, and telephone services on a retail basis to medium and large business customers.

7.2 Competition and Benchmarking

The cable TV and internet services markets within the city are competitive. National telecommunications firms such as Brightspeed, Cox Communications, Dish, and AT&T offer services. All of these companies also have licensed or priority access to wireless spectrum, which may further increase competition for telecommunications services within LUS Fiber's expanding service territory. As LUS Fiber continues to expand into new territories, it will face new challenges and competition where it has acquired grant funding to drive its expansion.

Across most of its service territory, LUS Fiber's network has significant technical advantages over its competitors' networks. Increased reliance on videoconferencing platforms during the pandemic has led to growing demand for upload capacity, but the overall capacity limitations of hybrid fiber-coaxial ("HFC") networks forces Cox to offer service with 10 percent or less of overall bandwidth dedicated to upload. AT&T's digital subscriber line ("DSL") network can only provide a similarly asymmetrical service, with even more limited overall capacity. However, AT&T has upgraded its copper plant with fiber in some parts of Lafayette and the surrounding areas, enabling the company to offer symmetrical internet services comparable to LUS Fiber. AT&T is continuing to expand its fiber network, including in parts of Lafayette, though the extent of its fiber construction plans in the area remains unclear at this time. AT&T's methodology is to prequalify potential customers in an area to determine if they will build out to that area. LUS Fiber continues to strive to be the first into an area with a broader service offering and better customer service and pricing.

[redacted] LUS Fiber offers comparable and competitively priced cable TV packages as its competitors throughout its service territory. LUS Fiber's internet services are competitively priced and deliver faster download speeds and significantly faster upload speeds than any other provider can offer, except where AT&T's fiber service is available. LUS Fiber also offers customers a unique feature that enables peer-to-peer connections within the city limits with excellent data exchange speeds. Currently competitors do not offer this feature. Telephone service is competitive but difficult to compare directly with competitors due to how services are packaged.

Table 7-2 summarizes and compares LUS Fiber and competitors' internet service offerings within the City. Lafayette Economic Development Authority also markets these capabilities to businesses the Authority is working to attract.

Table 7-2: Communications System Competitive Internet Service Offerings

Provider	Speed (Download/Upload) in Mbps	Monthly Price (Regular/ Non-Promotional)
LUS Fiber Residential	3/3	[redacted]
LUS Fiber Residential	60/60	
LUS Fiber Residential	100/100	
LUS Fiber Residential	300/300	
LUS Fiber Residential	350/350	
LUS Fiber Residential	1,000/1,000	
LUS Fiber Residential	10GB/10GB	
LUS Fiber w/ Wi-Fi	60/60 and Wi-Fi	
LUS Fiber w/ Wi-Fi	100/100 and Wi-Fi	
LUS Fiber w/ Wi-Fi	350/350 and Wi-Fi	
LUS Fiber w/ Wi-Fi	1000/1000 and Wi-Fi	
Cox Residential	100/5	$50.00
Cox Residential	250/10	$70.00
Cox Residential	500/10	$90.00
Cox Residential	1000/35	$120.00
ATT Fiber Residential	100/100	$55.00
ATT Fiber Residential	300/300	$65.00
ATT Fiber Residential	500/500	$70.00
ATT Fiber Residential	1000/1000	$85.00
ATT Fiber Residential	2000/2000	$155.00
ATT Fiber Residential	5000/5000	$255.00
Brightspeed Fiber Residential	Up to 200	$49.00
Brightspeed Fiber Residential	Up to 500	$59.00
Brightspeed Fiber Residential	Up to 940	$69.00
LUS Fiber Business	10/10	[redacted]
LUS Fiber Business	25/25	
LUS Fiber Business	50/50	
LUS Fiber Business	100/100	
LUS Fiber Business	500/500	
LUS Fiber Business	1000/1000	
LUS Fiber Business	2000/2000	
LUS Fiber Business	10000/10000	
Cox Business	50/10	$64.00

Provider	Speed (Download/Upload) in Mbps	Monthly Price (Regular/ Non-Promotional)
Cox Business	100/20	$84.00
Cox Business	200/20	$124.00
Cox Business	300/30	$164.00
Cox Business	500/35	$214.00
Cox Business	1000/35	$314.00
ATT Business	8/1	$80.00
ATT Business	12/1.5	$130.00
ATT Business	50/10	$200.00
ATT Business	100/20	$300.00
ATT Fiber Business	300/300	$70.00
ATT Fiber Business	500/500	$100.00
ATT Fiber Business	1000/1000	$170.00
ATT Fiber Business	2000/2000	$185.00
ATT Fiber Business	5000/5000	$285.00
Brightspeed Fiber Business	Up to 200	$49.00
Brightspeed Fiber Business	Up to 500	$59.00
Brightspeed Fiber Business	Up to 940	$69.00

Source: LUS Fiber

7.3 Operations and Related Performance

As a normal course of business, service outages do occur. Since its inception, LUS Fiber has successfully restored service in a timely manner when outages occur. Being able to minimize and quickly restore service is a testament to the capacity of the backbone rings that enable the fiber huts to temporary switch feeder paths when a cut occurs. Successful outage management requires proactive periodic replacement and upgrade of equipment. Overall, LUS Fiber performance remains highly reliable with limited outages for customers. Customers regularly give LUS Fiber high marks for reliability, contrasting the negative reliability trend of its competitors. There were no major network outages in 2023. There were a few minor outages due to fiber cuts by third party construction crews; these outages were geographically isolated and affected a small percentage of customers.

Customers may pay their bill by mail, phone, online, drop box, or in person. LUS Fiber also accepts automatic bank or credit card payments. LUS Fiber continues to monitor its customer's experience internally and performs regular internal audits to measure its level of service.

7.3.1 Communication Shared Services

From 2021 on, Communications System employees and facilities were organized separately from Utilities System operations; however, several services (such as accounting) and reporting functions were shared among the Communications System and Utilities System. In accordance with the requirement to maintain separate Utilities System and Communications System funds, all costs associated with these services are accounted for separately. An appropriate portion of shared costs are allocated to the Communications System through LCG's Cost Allocation Plan, in compliance with the "Fair Competition Act."

Prior to November 2020, the LUS Business Support Services division managed the customer service for both the Utilities System and the Communications System. In November, the Communications System took on direct management of LUS Fiber's customer service employees. The Communications System continues to share the same office space and customer service centers as the Utilities System. All customer service costs are allocated between the Utilities System and the Communications System using an appropriate allocation method.

7.3.2 Construction and Installation

LUS Fiber has experienced fiber optic technicians on staff to maintain its existing plant. This crew can do line work, maintenance, splicing, as well as troubleshooting. Major new build projects are done by a contracted construction company(s). LUS Fiber staff augment the contract crews during major new build projects.

[redacted]

LUS Fiber continues to expand its network organically but has received external grants that will enable expansion beyond the Lafayette Parish boundaries. LUS Fiber was successful in obtaining state of LA GUMBO program, federal grants, and has received funding commitments from other nearby parishes to expand service into their areas.

The engineering department designs and prepares work prints for new construction projects. Market growth is considered in the design process to efficiently use the resources to accommodate future expansion of the network.

[redacted]

LUS Fiber has put a strong emphasis on more efficient installations for businesses and residential customers, decreasing timeframes by over 50 percent and striving for same day installs.

7.3.3 Fiber Documentation and Automation

LUS Fiber uses [redacted] software for mapping its communication network. [redacted] allows the user to readily locate equipment and track a fiber from the headend to the subscriber's address. [redacted]

[redacted]

[redacted]

7.3.4 Outages and Performance Metrics

There have been no major network outages since last year's report. There were a few minor outages resulting from fiber cuts due to third party construction crews, that were geographically isolated and affected only a small percentage of customers.

As part of normal operations, LUS Fiber continues to track outages and key metrics (e.g., install timeframes, trouble ticket resolution timeframes, construction cost per foot, etc.). LUS Fiber has a robust disaster recovery plan through use of mutual aid agreements with various other fiber providers and contractors to seamlessly recover from unforeseen events.

7.3.5 Environmental Issues

LUS Fiber has had no environmental issues since the last report. Given the design and operation of LUS Fiber, there are limited environmental compliance issues. Fiber is installed on LUS's overhead electric poles and in underground ducts co-located within the underground electric distribution system, avoiding additional right-of-way requirements or construction and land use related issues.

7.3.6 Security and Risk Assessment

LUS Fiber indicated that there was a ransomware attack in the late FY 2023 where PDF files of customer bills were acquired. LUS Fiber hired Artic Wolf who evaluated the breach, outlined the attack methods, and recommended upgrades to strengthen security which included implementation of multifactor authentication. LUS Fiber is still investigating the breach to determine impacts. Daily system operations were not impacted and a final conclusion is still pending.

7.4 Regulatory Structure and Compliance

LUS Fiber adheres to Louisiana's Local Government Fair Competition Act (the "Fair Competition Act"). The Fair Competition Act requires, among other provisions, that LUS Fiber must operate in a manner that does not discriminate against competing providers of the same service and it may not grant any undue or unreasonable preference to itself or any private provider of covered services. Further, LUS Fiber may not cross-subsidize its covered services with tax dollars, income from other local government or utility services, below-market rate loans from the local government, or any other means. Under the Fair Competition Act, covered services of LUS Fiber include telecommunications services, advanced services (internet), and cable TV.

Separate from the requirements of the Fair Competition Act and Louisiana Public Service Commission ("LPSC") Rules, the LPSC has some jurisdiction over the telecommunication rates of LUS Fiber—but it does not have jurisdiction over LUS Fiber's rates for advanced services (internet) and cable TV.

Pursuant to the Act, LUS Fiber is also subject to certain rules and audit requirements of the LPSC. In particular, pursuant to the Act, the LPSC enacted Cost Allocation and Affiliate Transaction Rules ("LPSC Rules") and has responsibility and authority for compliance thereof by LUS Fiber. LUS Fiber is required by the LPSC Rules to file a certification with the LPSC on an annual basis, signed under oath, stating that it is complying with the Act and the LPSC Rules. After 2014, LUS Fiber was no longer required to file the annual audit.

7.4.1 Attest Audit

The LPSC Rules require LUS Fiber to have an attest engagement audit performed on an annual basis by an independent certified public accountant. The attest audit expresses an opinion as to whether the LUS Fiber systems, processes, and procedures comply with the Fair Competition Act and the LPSC Rules. LUS Fiber obtains and files such attest audit reports with the LPSC annually for each fiscal year of its operations. In addition, pursuant to the LPSC Rules, the LPSC conducts separate audits of LUS Fiber's compliance with the LPSC Rules.

7.4.2 Federal Communications Commission

In February 2015, the Federal Communications Commission ("FCC") ruled and reclassified broadband internet access services under Title II of the Communications Act. The FCC will regulate certain aspects of broadband internet services across the country, particularly the ability of broadband providers (e.g., AT&T/DirecTV, Cox Communications) to slow or block competitors' services and/or charge fees to content providers to deliver content at faster speeds. This broadband regulation is commonly referred to as "Net Neutrality." While the FCC ruled on Net Neutrality, the U.S. Telecom Association filed a lawsuit against the FCC challenging the Net Neutrality rule. In June 2016, the US Court of Appeals upheld the FCC's Net Neutrality rules and the idea that broadband access is a public utility, rather than a luxury.

In November 2017, a newly appointed FCC Commissioner proposed a repeal of Net Neutrality, with the FCC subsequently voting to repeal the legislation. Various states announced they planned to sue the FCC over the decision. In February 2018, the FCC informed Congress of their intention to repeal Net Neutrality, giving Congress 60 days to stop the repeal with the Congressional Review Act. Congress failed to pass the Congressional Review Act and the 2015 Net Neutrality Order was repealed. The FCC Restoring Internet Freedom Order took effect on June 11, 2018.

7.4.3 Environmental Compliance

Given the design and operation of the Communications System, there are limited environmental compliance issues. The Communications System fiber is installed on LUS's overhead electric poles and in underground ducts co-located within the underground electric distribution system, avoiding additional right-of-way requirements or construction and land use related issues.

7.5 Payment In Lieu of Tax and Imputed Tax

Pursuant to terms of a regulatory settlement, LUS Fiber must calculate and pay an Imputed Tax to the City. The Imputed Tax is equivalent to the payments that it would have to make if it were a privately-owned entity paying applicable state and local sales tax, property tax, franchise tax, and income tax. This Imputed Tax calculation is performed annually and can be paid to either the LUS or the LCG General Fund.

As LUS Fiber improves operating margins, LUS Fiber will be able to pay ILOT to the LCG General Fund. Once ILOT payments are made to the LCG General Fund, the corresponding Imputed Tax obligation is reduced on a dollar-by-dollar basis. The ILOT calculation provides for an ILOT payment up to 12 percent of Adjusted Revenues (revenues less the cost of goods sold (COGS)). COGS usually includes, for example, cost of items such as items intended for resale, materials, parts used to make a product, direct labor costs, supplies used in either making or selling the product, overhead costs, shipping or freight, indirect costs like distribution or sales force costs, internet transport costs, etc. All or a portion of the ILOT payment is subject to an ILOT test. The ILOT test ensures that LUS Fiber retains sufficient cash to meet capital obligations. The test requires that the ILOT payment be no greater than 12 percent of Adjusted Revenues, or the cash balance available after the payment of operating expenses and debt service less 7.5 percent of Adjusted Revenues. LUS Fiber tax requirement cannot be less than that required by the Imputed Tax calculation.

On July 21, 2015, the City-Parish Council approved Ordinance No. O-014-2015 that revised the ILOT calculation. This ordinance recognizes that LUS Fiber operates in a competitive environment and the current ILOT calculation is a greater expense than Imputed Tax. With the approval of this ordinance, LUS Fiber was required to pay an ILOT amount equal to Imputed Taxes. The Imputed Tax payments were made to LUS and the City for years 2016 through 2020 as prescribed in the ordinance. Beginning in 2020, 100 percent of Imputed Tax payments went to the city. The reduced financial obligation has helped increase cash available for Communications System's capital improvement projects and reserves, thereby reducing pressure to raise rates in the future and helping to maintain a level playing field with competitors.

In April 2024, LUS Fiber and LCG agreed that LUS Fiber would make the FY 2023 ILOT payment to LCG equal to [redacted] percent of Adjusted Revenues as described above. The audited financial statements for FY 2023 include the ILOT payment of [redacted] million.

At the time of this report LUS Fiber is working collaboratively with LCG to finalize the ILOT payment to the City for FY 2024 and future years. The audited information for FY 2023 includes the ILOT payment to the City. For the purposes of the Continuing Disclosures, LUS Fiber has directed Burns & McDonnell to include the ILOT payment in its projections for FY 2024 and forward until a final resolution for future ILOT payments is reached.

7.6 Operating and Capital Budget

LUS Fiber prepares and submits their proposed operating and capital budget to LCG. The operating portion of the budget contains projections of revenues and expenses for the upcoming fiscal year. The most recent CIP provided by LUS is presented in Table 7-3 and totals $44.7 million over the five-year period. This five-year CIP does not include grant related projects described in Section 7.6.1. LUS Fiber's five-year CIP is reviewed, updated, and budgeted annually. The general life expectancy of incoming connections and distribution (e.g., headend), network, and hut equipment is 5 to 10 years, at which time replacement or upgrade may be warranted. Customer premises equipment has a roughly 5 year life expectancy.

Table 7-3: Projected Capital Improvement Plan

Project Description	2024	2025	2026	2027	2028	Total
Customer Installations	$1,440,000	$1,800,000	$2,070,000	$2,277,000	$2,390,850	$9,977,850
Customer Premise Equipment	2,256,841	2,821,051	3,244,209	3,568,630	3,747,061	15,637,792
Headend Equipment and Upgrades	1,550,000	1,250,000	969,000	850,000	850,000	5,469,000
Hut Equipment and Upgrades	150,000	250,000	633,000	650,000	650,000	2,333,000
Network Equipment and Upgrades	125,000	250,000	250,000	250,000	250,000	1,125,000
Special Equipment	1,750,000	1,913,000	1,750,000	2,400,000	2,400,000	10,213,000
Special Capital	0	0	0	0	0	0
Total	$7,271,841	$8,284,051	$8,916,209	$9,995,630	$10,287,911	$44,755,642

Source: LUS Fiber CIP. All projects are shown in 2023 dollars. Projected capital projects above do not include grant related projects.

The timing of capital projects is continually evaluated based on priority given changing circumstances; therefore, projects identified in the early years of the five-year program reflect a higher degree of certainty. The projects identified in the latest updated LUS Fiber CIP, which excludes grant related projects, are expected to be funded with cash available from LUS Fiber operations.

LUS Fiber's revenue performance was not aligned with the 2023 Budget and is presented in in Table 7-4. LUS Fiber collected $56.8 million in operating and miscellaneous revenues in 2023, as compared to the budgeted $47.4 million. This was primarily due to the recognition of approximately $9 million in federal grants received by LUS Fiber. LUS Fiber's actual revenue, excluding grant income, was below the budgeted projection. Operating expenses were under budget at $20.7 million, as compared to the budgeted $30.6 million. Other Income & Expenses were close to the budgeted amount except for the imputed tax. This difference was due to a change in collecting ILOT methodology. Overall, the cash available for capital was above the budgeted amount. LUS Fiber exceeded DSCR requirements and continued to increase its net revenues. LUS Fiber plans to use the grant funding reported in miscellaneous income to support major capital expansion projects discussed in the following section of this report.

Table 7-4: Communications System Budget to Actual Performance

	Actual (millions)	Adopted Budget (millions)	Difference (millions)	Difference (%)
Operating Revenues				
Retail Sales	[redacted]	[redacted]	[redacted]	[redacted]
Wholesale Sales	[redacted]	[redacted]	[redacted]	[redacted]
Interest Income	[redacted]	[redacted]	[redacted]	[redacted]
Miscellaneous Income	[redacted]	[redacted]	[redacted]	[redacted]
Total Operating Revenue	[redacted]	[redacted]	[redacted]	[redacted]
Operating Expenses				
Cost of Production	[redacted]	[redacted]	[redacted]	[redacted]
Other O&M	[redacted]	[redacted]	[redacted]	[redacted]
Total Operating Expenses	[redacted]	[redacted]	[redacted]	[redacted]
Other Income (Expenses)				
Normal Capital	[redacted]	[redacted]	[redacted]	[redacted]
Interest on Long Term Debt	[redacted]	[redacted]	[redacted]	[redacted]
Principal on Long Term Debt	[redacted]	[redacted]	[redacted]	[redacted]
Note Payable	[redacted]	[redacted]	[redacted]	[redacted]
Imputed Tax	[redacted]	[redacted]	[redacted]	[redacted]
Total Other	[redacted]	[redacted]	[redacted]	[redacted]
Cash Available for Capital	[redacted]	[redacted]	[redacted]	[redacted]

Source: LCG Finance and Accounting

[1] Actual miscellaneous income for 2023 includes $9M federal grants

7.6.1 Major Capital Investments

LUS Fiber has recently received multiple grant awards to expand services and their service area. The total cost of these major capital investments is approximately $44 million. The grants are broken down into 2 EDA grants, 4 GUMBO grants, and 1 NTIA grant for a combined total of $33 million. LUS Fiber will be funding the balance of the capital cost through internal funds and contributions from other parishes. These grant projects will serve new residential and business customers for broadband services. These locations will be located within the Acadia, Evangeline, Iberia, Jefferson Davis, and Vermilion parishes. LUS Fiber begun construction of these projects in late 2023 and is beginning to incur cost and receive grant funds as portions of the project are completed in FY 2024. The grant related projects are anticipated to be completed by the end of FY 2025. LUS Fiber conservatively expects the projects to generate an additional [redacted] per year in net income for LUS Fiber. The incremental capital cost, federal grant funds, other parish contributions, incremental revenues, and incremental expenses provided by LUS Fiber to Burns & McDonnell have been included in the Continuing Disclosure financial projections.

7.7 Accounting and Financial Statements

The accounting responsibilities for LUS Fiber reside with LCG. LCG prepares monthly Financial and Operating Statements for LUS Fiber. These statements include a balance sheet, income statement, and detailed revenues and expenses. As part of LCG, LUS Fiber follows the same fiscal year with the ending date of October 31. The audit for each fiscal year is generally not available until April of the following year. The detailed financial data included for the Communications System was primarily based on the monthly Financial and Operating Statements that support and align with the audited ACFR. The tables included in this Report may vary slightly from the tables in the ACFR as numbers may be presented in various ways to calculate metrics. Although the numbers may vary, the differences are not material and do not affect the resulting metrics.

7.7.1 Balance Sheet

A comparative balance sheet is presented in Table 7-5. Total Assets have steadily increased over the five years primarily due to renewal and replacement of assets. Since 2019, the Retained Earnings increased due to positive net operating income. There was a significant increase in uncollectible accounts in 2022 due to an upgrade of the billing system. During the upgrade, the Communications System fell behind on writing off uncollectible accounts; however, as the upgrade was completed, the write-offs returned to historical levels and declined back towards historical averages.

Table 7-5: Communications System Historical Balance Sheet

Total Assets	2019	2020	2021	2022	2023
Communications Plant	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Bonds and Special Accounts	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Cash and Cash Equivalent	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Accounts Receivable	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Reserve for Uncollectible Accounts	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Prepayments	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Inventories	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Deferred Debits	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Assets	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Liabilities & Equity					
Long Term Debt	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Current Liabilities	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Long Term Liabilities	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Retained Earnings	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Liabilities & Fund Equity	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Source: Communications System Financial and Operating Statements

7.7.2 Fund Balances

Article V of LUS Fiber General Bond Ordinance dictates LUS Fibers' funds and accounts and how the 'Flow of Funds' works. Article V creates the following accounts: Receipts, Operating, Sinking Fund, and Capital Additions. In addition, funds may be created as new bonds are issued.

Table 7-6 summarizes the beginning balance, receipts, disbursements, and ending balances of the required funds as of 2023. The Total Fund Balances [redacted] by [redacted] million, or [redacted] percent, in 2023.

Table 7-6: Communications System Fund Balances as of October 31, 2023 ($1,000)

	Receipts	Operating	Debt Service	Retained Earnings Reserve	Capital Additions	Security Deposits	Construction Funds	Total Accounts
Beginning Balance	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Receipts	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Disbursements	50,198	39,593	10,008	0	22,676	1	0	122,476
Ending Balance	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Source: LUS Fiber Funds Cash Flow Statement 2022-2023

7.7.3 Income Statement

Table 7-7 presents the comparative income statement. The Operating Revenues have increased consistently since 2019 as the Communications System expanded and gained market share, while operating expenses have remained steady. Correspondingly, the Net Operating Revenues have increased [redacted] percent annually over the last five years.

Other Income and Expenses have varied over the years as amortization, fund balances, and interest rates changed. A large increase in Misc. Non-Operating Revenue was realized for the addition of a federal grant being awarded in FY 2023. Over the past five years, LUS Fiber has been able to increase its revenue without increasing operating expenses, which has led to a steady increase in net income. Excluding the increase in miscellaneous non-operating revenue, LUS Fiber continued to increase net income before ILOT in FY 2023. However, it should be noted that operating expenses have decreased largely due to increased vacancies. As vacancies are filled in FY 2024, LUS Fiber expects expenses to increase.

Table 7-7: Communications System Income Statement

	2019	2020	2021	2022	2023
Operating Revenues	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Operating Expenses	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Net Operating Revenues	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Depreciation	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Net Operating Revenues after Depreciation	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Other Income					
Interest Income	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Unrealized Gain/Loss on Invs	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Amortization of Debt Premium	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Amortization of Debt Discount	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Misc. Non Operating Revenue	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Other Operating Gains/Losses	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Other Income	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Other Expenses					
Amortized Bond Issuance Costs	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Amortized Start Up Costs	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Amortized 2007 Expense	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Amortized Loss On Refunding	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Interest on Long Term Debt	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Interest on Long Term Debt - LUS Note	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Interest on Customer Deposits	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Extraordinary Charges	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Other Expenses	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Net Income Before in Lieu of Tax	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
ILOT and Imputed Taxes	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Net Income	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Source: Communications System Financial and Operating Statements

7.7.4 Cash Flow

Cash flow is an important indicator of municipal utility financial health. Municipal utilities typically operate on a Cash Basis. Cash Basis means that non-cash expenses, such as depreciation are excluded from calculations, but other cash expenses, such as principal payments associated with debt service are included. Since municipally owned utilities are primarily concerned with accumulating sufficient cash balances to meet operating expenses, debt service, capital improvements, and other obligations, the financial results are presented in this manner.

Table 7-8 presents the change in cash due to Operations and Imputed Tax or ILOT for the Communications System over the period 2019 through 2023. These numbers indicate current Communications System revenues have improved from year-to-year as new customers were added to the system. Since 2019, the Communications Systems Net Operating Revenues met operating expenses, debt service, ILOT, or Imputed Tax obligation of the utility, and generated positive cash flow. The 5-year cumulative net margin resulted in a gain of approximately [redacted] million.

Table 7-8: Communications System Comparative Cash Flow

	2019	2020	2021	2022	2023	Total
Operating Revenues	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Operating Expenses	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Net Operating Revenues	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Debt Service	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Balance After Debt Service	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Less ILOT/Imputed Tax	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Change in Cash due to Operations and ILOT / Imputed Tax	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Source: Communications System Financial and Operating Statements

7.8 Historical Capital Improvement Program

LUS Fiber uses a capital work order system to track capital expenses. The historical capital presented in Table 7-9 reflects investment in infrastructure funded by the Series 2007 Bonds, Series 2012 Bonds, and retained earnings. The Series 2007 Bonds were issued to build the retail side of the Communications System. The Series 2012 Bonds were issued for customer installations and equipment and various projects. The Series 2012 Bonds were refunded with the Series 2021 Bonds in FY 2022.

As mentioned, LUS Fiber attained franchise status in November 2017 to offer communications service outside Lafayette in the City of Broussard, City of Youngsville, and unincorporated areas in the Parish. In 2018, LUS Fiber expanded into Broussard and Youngsville to serve new customers as indicated by the capital spending in 2018. In 2019, LUS Fiber expanded into Carencro. LUS Fiber is continuing to build out targeted areas.

Previously LUS Fiber was awarded a grant to extend service to underserved commercial areas in St. Martin Parish and Iberia Parish. [redacted].

Table 7-9: Communications System Historical Capital Improvement Program

	2019	2020	2021	2022	2023
Series 2012A Bonds	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Series 2012 B Bonds	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Retained Earnings	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Special Equipment	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Capital	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Source: Communications System Status of Construction Work Order Reports

7.9 Historical Financial Performance

Since its inception in 2009, the Communications System exhibited steady growth and improved operating margins. The Communications System credit rating from Moody's was increased in 2019 from A3 to A2.

7.9.1 Historical Debt Service Coverage

Communications System debt service for years 2019 through 2023 include the Series 2007 Bonds, Series 2012 Bonds, Series 2015 Bonds, and Series 2021 Bonds. The Series 2012 Bonds were refunded with the Series 2021 Bonds in FY 2022, which lowered the Communications System debt service. Table 7-10 presents historical debt service and the associated DSCR. In each year since 2019, the DSCR exceeded the minimum coverage requirement of 1.0 required by the Bond Ordinances.

Table 7-10: Communications System Historical Debt Service Coverage

Year	Operating Revenues	Operating Expenses	Net Revenues Available for Debt Service	Debt Service	Debt Service Coverage Ratio
2019	$41,011,835	$21,398,164	$19,613,671	$9,428,241	2.1
2020	$42,929,555	$22,388,190	$20,541,364	$9,430,991	2.2
2021	$43,946,357	$22,627,854	$21,318,503	$9,431,991	2.3
2022	$45,648,745	$21,239,635	$24,409,110	$9,540,240	2.6
2023	$46,710,973	$20,749,656	$25,961,317	$9,866,765	2.6

Source: Communications System Financial and Operating Statements
(1) Operating revenues include interest income and other miscellaneous income.
(2) O&M and other expenses include customer service, and A&G costs. Operating expenses do not include ILOT internal loan payments to LUS, and other miscellaneous expenses.
(3) Debt service includes the Series 2007 Bonds, Series 2012 Bonds, and Series 2015 Bonds. The 2012 Series Bonds debt service in years 2012 and 2013 was paid for out of capitalized interest. The Series 2012 Bonds were fully refunded with the Series 2021 Bonds in FY 2022.

7.9.2 Revenue Analysis

The Communications System's internet revenues have consistently increased over the last five years as the Communications System expanded as shown in

Table 7-11. Cable and telephone revenues however, have been slowly decreasing over the last three years as expected. Wholesale and other revenues have fluctuated and include dark fiber lease, late fees, miscellaneous revenues, colocation, and other items.

Table 7-11: Communications System Historical Operating Revenues

	2019	2020	2021	2022	2023
Cable TV	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Data/Internet					
Telephone					
Wholesale					
Other					
Total Operating Revenues					

Source: Communications System Financial and Operating Statements

7.9.3 Expense Analysis

The cost of goods sold ("COGS") decreased from 2020 to 2023 as presented in Table 7-12. COGS predominantly consists of programming and content costs associated with service offerings. Consumers have been shifting away from cable to streaming services or Wifi based TV services such as YouTube TV which has been the key driver in this decline and is expected to continue. The Plant Specific Expense averages [redacted] million and increased by [redacted] percent in 2023. The Plant Specific Expense includes vehicles, furniture, electronics, maintenance, repairs, general maintenance, and other plant related items. The Plant Non-specific Expense has averaged approximately [redacted] million per year and decreased by [redacted] percent in 2023. The primary cost item in this category is engineering. Customer Operations have averaged [redacted] million over the last five years and decreased [redacted] percent in 2023. The administrative costs averaged [redacted] million over the past five years and decreased by [redacted] percent in 2023. The reduction in plant non-specific expense and customer operations is primarily attributed to loss of key positions in engineering, marketing, and customer service which LUS Fiber is actively working to fill in FY 2024.

Table 7-12: Communications System Historical Operating Expenses

	2019	2020	2021	2022	2023
Cost of Goods Sold	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Plant Specific Expense					
Plant Non Specific Expense					
Customer Operations					
Administrative					
Other Operating Expenses					
Total Operating Expenses					

Source: Communications System Financial and Operating Statements

7.9.4 Credit Event Analysis

LUS Fiber is financially separate from the Utilities System; however, if LUS Fiber fails to transfer to the Paying Agent by the 21st day of the month proceeding an interest payment date the amount equal to the debt service on LUS Fiber Bonds falling due on the first day of the following month (a Credit Event), the

Utilities System is required to pay such debt service (but only to the extent of such insufficiency) from revenues available for the payment of Subordinated Indebtedness on deposit in the Capital Additions Fund of the Utilities System. Upon the occurrence of a Credit Event, LUS Fiber must proceed to discontinue its provision of services, as soon as reasonably practical, taking into consideration minimizing the interruption of services to existing users of LUS Fiber. Pursuant to the ordinances of the City authorizing the issuance of LUS Fiber Bonds, the rate covenant contained in the Bond Ordinances were incorporated by reference into LUS Fiber Bond Ordinance, and the debt service requirements on any Communications System Bonds are treated as amounts payable with respect to Subordinated Indebtedness of the Utilities System for the purposes of the rate covenant under the Bond Ordinances. Table 7-13 shows that if a Credit Event had occurred in 2023, the Utilities System DSCR would have exceeded the minimum coverage requirement of 1.0 required by the Bond Ordinances.

Table 7-13: Credit Event Residual Balance Coverage Calculation

	2023
Utilities System Net Revenues	$90,592,081
Less Interest Income from Internal Loans	$750,716
Utilities System Balance Available for Debt Service	$89,841,364
Less Utilities System Debt Service (1)	$23,650,100
Less Capital of 7.5% (2)	$12,791,372
Utilities System Residual Revenues Available for Communications Debt Service	$53,399,892
Communications System Debt Service (3)	$9,866,765
Utilities System Debt Service Coverage Ratio for Communications System Debt	5.4

Source: LUS
(1) Debt service includes the Series 2012 Bonds and Series 2019 Bonds.
(2) The Bond Ordinance requires a minimum amount equal to 7.5% of the Adjusted Revenue deposits into the Receipts Account for the purposes of paying capital costs.
(3) The debt service in FY 2021 represents debt service on the Series 2012 Bonds and Series 2015 Bonds. The Series 2012 Bonds were refunded in FY 2022 with the Series 2021 Bonds.

7.10 Observations and Recommendations

Based on the analysis described herein, Burns & McDonnell offers the following observations and recommendations.

- Based on visual inspection of facilities, records audit, and interviews of LUS Fiber staff, the LUS Fiber communication network is in good condition, maintained properly and in accordance with industry practices [redacted]

[redacted]

- At the current customer levels, the Communications System generates sufficient revenues to meet operating and maintenance expenses, debt service, capital improvements, inter-utility loan payments, imputed taxes, and all other financial obligations, with a sufficient profit margin to allow the Communications System to spend [redacted] per year on continued network expansion.
- LUS Fiber has received multiple federal and state grants and established local parish partnerships to extend the network to unserved and underserved surrounding parishes. A portion of LUS Fiber's future revenue growth is based on its ability to expand into nearby unserved and underserved areas. LUS Fiber is using these federal and state broadband infrastructure grants to expand its territory and further grow its customer base. LUS Fiber has projected increases in customers and revenues resulting from these system expansions and provided those projections to Burns & McDonnell for inclusion in the continuing disclosure projections. These projections could potentially be higher or lower depending on market conditions and take rates. LUS Fiber is moving forward with current grants and potential future BEAD funding. LUS Fiber will continue to analyze all grants on an annual basis to determine their financial viability with changing labor and material costs.
- LUS Fiber is expanding into new parishes through the use of grants and other parish contributions. As the system expands outside of Lafayette, operating expense will increase proportionately. LUS Fiber will need to actively expand its staff in FY 2024 and plan for increases in operating expenses in multiple categories. LUS Fiber has projected increases in expenses resulting from these system expansions and provided those projections to Burns & McDonnell for inclusion in the continuing disclosure projections.
- LUS Fiber will need to closely monitor its cash position as it builds out its system expansion using the federal, state, and other parish contributions in FY 2024 and FY 2025. The federal and state grants are generally paid upon completion of the project. Based on information provided to Burns & McDonell, LUS Fiber is already closely managing these project costs and its funding sources.
- LUS Fiber should continue to improve its service catalogue, especially in the enterprise sector. A potential revenue opportunity lies in using its excess network capacity to serve additional enterprise customers.
- [redacted]
- LUS Fiber is currently being led by Interim Director Jeffrey Stewart who also serves as the current Utilities Director for LUS. He succeeds the previous Director Ryan Meche who left LUS Fiber in

January 2024. LUS Fiber is actively searching for a permanent Director and has brought in a consultant, Teles Fremin with CTC Technology & Energy, who previously served as the Interim Director for LUS Fiber prior to Mr. Meche's appointment as Director to assist Mr. Stewart and evaluate day to day functions for improvement. A new LUS Fiber System Director is expected to be hired and begin within the next month.

- [redacted] LUS Fiber has opened requisitions for all open management positions with the goal of having these positions filled by qualified and experienced candidates within this year and before a permanent System Director is appointed. Based on these future hires, LUS Fiber will continue to reevaluate the current business structure and will consider realignment and/or reassignment of certain components of the business to better position the company moving forward.
- Similar to LUS, all LUS Fiber departments are having challenges attracting and retaining staff due to lower than market labor rates and a competitive labor market. This has become a persistent and growing issue for LUS Fiber especially over the last two years as demonstrated by the growing number of open positions compared to budgeted positions. LUS Fiber should act immediately to remedy this as recommended previously in the electric utility section recommendations of this report.
- [redacted]

8.0 CONTINUING DISCLOSURES – SUMMARY

Government entities that issue bonds must enter into a continuing disclosure agreement to be in compliance with the Securities and Exchange Commission ("SEC") Rule 15c2-12. As part of the continuing disclosure agreement, the Issuer promises to provide certain annual financial information and material event notices to the public. These filings must be made electronically at the EMMA portal. Please refer to Section 9.0 for the Utilities System Continuing Disclosures, Section 10.0 for the LPPA Continuing Disclosures, and Section 11.0 for The Communications System Continuing Disclosures. Each of the following sections contains a table that cross references the required information with tables in the Report.

9.0 CONTINUING DISCLOSURES – UTILITIES SYSTEM

9.1 Introduction

Government entities that issue bonds must enter into a continuing disclosure agreement to be in compliance with the SEC Rule 15c2-12. As part of the continuing disclosure agreement, the issuer promises to provide certain annual financial information and material event notices to the public. These filings must be made electronically at the EMMA portal (www.emma.msrb.org). The Utilities System had the following outstanding debt as of October 31, 2023:

- Utilities Revenue Refunding Bonds, Series 2017
- Utilities Revenue Bonds, Series 2019
- Taxable Utilities Revenue Refunding Bonds, Series 2021
- Utilities Revenue Bonds, Series 2023

At the end of 2016, LUS refunded the majority of the Series 2010 bonds with the Series 2017 Bonds. In 2020, the Series 2010 Bonds were fully redeemed by the proceeds of the Series 2017 Bonds. The Series 2012 Bonds were refunded with the Taxable Utilities Revenue Refunding Bonds Series 2021 in FY 2022. LUS issued the Series 2023 Bonds at the beginning of FY 2024 and the debt service on those new bonds are included in the projections within these continuing disclosures.

The continuing disclosure agreements for the outstanding bonds require that specific tables contained in the Official Statements must be updated annually. This section includes forward-looking financial statements based on Burns & McDonnell's current expectations and projections about future events and financial trends regarding the Utilities System. Projections as contained herein reflect estimates of what might occur in the future based on the information available as of the date of this Report. Burns & McDonnell cannot predict the future or guarantee future financial performance of the Utilities System. To the extent that assumptions used in these projections vary from those actually observed, financial performance as presented herein will vary from actual performance. Burns & McDonnell prepared a 10-year projection of financial and operating data for the Electric, Water, and Wastewater Systems. Projections are based on Burns & McDonnell's review of historical operating results, the adjusted 2024 CIP and proposed 2025 CIP budgets, visual observations of the Utilities System assets, and other assumptions and considerations as listed in the Report. The projections prepared by Burns & McDonnell are for the Projected Period of November 1, 2023 through October 31, 2033. LUS provided actual historical data for the 2019 through 2023 period.

9.2 Information and Assumptions Relied Upon

The projected operating results for the Utilities System, also referred to as LUS, rely upon information and assumptions gathered in the course of Burns & McDonnell's review. Those assumptions which we relied upon are summarized below.

1. LUS is assumed to operate and maintain the Utilities System following prudent utility practices. Prudent utility practices mean practices, methods, and acts that would be expected to accomplish the desired results in a workmanlike manner.
2. LUS is assumed to continue to hire and maintain competent personnel. If needed, LUS will provide training to personnel to ensure the safety of personnel and reliability of the utilities.
3. LUS is assumed to continue to maintain and renew any required permits or approvals related to the utilities including electric, water, and wastewater treatment plants and sites.
4. There will not be further regulation of LUS facilities that require major capital expenditures for LUS to comply beyond those referenced in this Report and included in the LUS CIP.
5. It is assumed that the Rodemacher Unit 2, Hargis-Hébert Plant, T. J. Labbé Plant, and the future combustion turbine plant will be maintained and operated in good condition throughout the Projected Period. Rodemacher Unit 2 will be retired at the end of FY 2027. A new combustion turbine plant, Bonin 4, is planned to come online in 2028 to replace the Rodemacher Unit 2 generation capacity.
6. It is assumed that the electric transmission and distribution systems will be maintained and operated in good condition throughout the Projected Period.
7. It is assumed that the water treatment plants, ground water wells, and distribution system will be maintained and operated in good condition throughout the Projected Period.
8. It is assumed that the wastewater treatment plants and collection system will be maintained and operated in good condition throughout the Projected Period.
9. It is assumed that all existing contracts will be honored and that the Utilities System would extend or replace any expired contracts as needed.
10. It is assumed that standard operating procedure for LUS will continue and will not include the effects of any event outside of LUS's control including events traditionally considered force majeure.
11. LUS is assumed to have adequate coal, natural gas, and water supply for operation of the power plants.
12. LUS is assumed to continue to have adequate water supply from the Chicot aquifer to meet the customers' needs.

13. LUS is assumed to continue to be a market participant in MISO including providing capacity and meeting all other operational and financial requirements.
14. LUS is assumed to continue to have adequate transmission access in MISO to buy and sell power as needed.
15. Utilities System financial and operating data was provided by LUS and LCG. LPPA financial and operating data was provided by LUS, LPPA and Cleco staff. Data provided includes historical financial and operating data for 2019 through 2023, updated 2024 CIP Budget, the proposed 2025 Budget, and the LPPA Operating and Capital Budget.
16. Burns & McDonnell prepared an IRP for the electric system in 2020. The IRP contained projections of forecasted fuel usage and cost, MISO wholesale market revenues, MISO wholesale market costs, and power purchase agreement costs for both LUS and LPPA power plants. The IRP assumed Rodemacher Unit 2 is retired in 2027 and is replaced with a simple cycle gas turbine plant of similar capacity. The IRP assumed additional solar capacity and energy was assumed to be added between 2021 and 2029. LUS is currently executing this plan and has approved the decision with the Joint Owners to retire Rodemacher Unit 2 in 2027. LUS has also begun early development and engineering of the new simple cycle gas turbine plant, Bonin 4, which is scheduled to be online in 2028.
17. Burns & McDonnell prepared an updated load forecast in FY 2021. The load forecast was used to develop the revenue forecast and power requirements in this financial forecast update.
18. Burns & McDonnell prepared an updated long term forecast of fuel cost, purchased power cost, and wholesale market revenues in 2023 which is included in the financial projections. The forecast included updated projections of plant generation dispatch, plant fuel cost, plant variable O&M costs, MISO load costs, and wholesale revenues. The updated forecast also included the costs and wholesale revenues for three new 100 MW solar PPAs, the addition of a new gas turbine plant at the existing Bonin site in 2028, and the retirement of Rodemacher Unit 2 at the end of 2027.
19. The existing electric rates allow LUS to pass the direct MISO power cost, fuel cost, certain LPPA costs, environmental costs, purchased power costs, and other eligible costs directly to consumers in the form of a fuel charge that is adjusted regularly. This mechanism greatly reduces risk to LUS.
20. Future costs associated with emissions or potential environmental compliance have not been included within the projected operating results. Rodemacher Unit 2 will be retired in 2027 and Burns & McDonnell has included preliminary estimated costs for the retirement and closure of the plant. All operating expenses associated with environmental compliance are included in the fuel charge and passed through to customers in the retail electric rates.

21. Burns & McDonnell reviewed recent and expected trends for inflation and assumed an inflation rate of 2.6 percent in FY 2024. The most recent semiannual Blue Chip Economic Indicator projection of GDP was used for long term inflation for FY 2025 to FY 2033. The GDP inflation factor was used to escalate O&M expenses and capital similar to previous years.
22. The electric utility is currently planning to issue new bonds at the beginning of FY 2025 and FY 2027 for the new LUS gas turbine power plant which is assumed to cost $362 million. On March 5, 2024 LUS received approval from the City to issue up to $400 million to fund the capital cost of the project, fund reserve funds, and pay issuance costs and fees. The FY 2025 and FY 2027 debt service schedules are based on pricing projections provided by Stifel in February 2024. Projected interest cost associated with other future LUS bonds were assumed to be 6.0 percent with new bonds being financed over 25 years.
23. The forecast assumes that LUS is implementing a series of rate increases which began in FY 2023 for each of the utilities. The rate increases are based on the rates adopted by the City Council in FY 2022. The electric utility is implementing 3.0 percent base rate increases in FY 2024 and FY 2025. The wastewater utility is implementing 9.5 percent rate increases in FY 2023, FY 2024, and FY 2025. The water utility is implementing 8.0 percent rate increases in FY 2023, FY 2024, and FY 2025. The FY 2023 rate increases for the water and wastewater have already been implemented.
24. Burns & McDonnell completed a rate study update for LUS in early FY 2024 to support the financing of new projects including the Bonin 4 power plant. The rate study evaluated the need for additional electric, water, and sewer rate increases after FY 2025. The proposed rate electric rate increases through FY 2028 were approved on March 5, 2024. LUS has not yet requested approval of the water and sewer rate increases proposed in the rate study update. The forecast includes the newly adopted electric rate increases of 3.5 percent on the base rates in FY 2026, FY 2027, and FY 2028. The forecast assumes annual water rate increases of 5.0 percent from FY 2027 through FY 2032. The forecast assumes annual sewer rate increases of 5.0 percent from FY 2027 through FY 2032.
25. The ILOT calculation provides for an ILOT payment equal to 12% of the Receipts Fund deposits. To be eligible to make the ILOT payment, LUS must first pass an ILOT Test. The ILOT test ensures that the Utilities System retains sufficient cash to meet capital obligations. If cash available after payment of operating expenses and debt service, less 7.5% of the Non-fuel Revenues, is greater than 12% of the Receipts Fund, LUS passes the test and makes the ILOT payment to the City. If LUS fails the ILOT test, LUS pays the cash available after debt service less 7.5% of the Non-fuel Revenues.
26. The projections include the LUS CIP which reflects capital projects designed to upgrade, renew, and expand the system to meet customer growth requirements. In this Report, the capital plan for FY 2024

through FY 2028 was based on the proposed 2024 five year CIP Budget while FY 2029 through FY 2032 are based on historical levels. The five-year CIP is updated annually.

27. Cash available reflects remaining funds available to LUS once all other credit obligations of LUS are satisfied. LCG has a financial objective that requires a minimum cash balance of $8,000,000 to be held in an Operation and Maintenance Fund. The Operation and Maintenance Fund resides in the Operating Fund providing a cash reserve to meet system O&M expense requirements. Once O&M expense and debt service obligations are met by LUS, accumulated cash balances are held in a Capital Additions Fund and are applicable to capital projects or other lawful uses. The Projected Period assumes that capital additions for LUS will be paid with a combination of cash balances available in the Capital Additions Fund and new debt.

9.3 Projected Operating Results Assumptions

Tables with forecasted results over the Projected Period can be found in Section 10 of this Report.

9.4 Electric System Revenue and Expense Projections

Burns & McDonnell completed a long-term system load forecast in 2021. Electric System retail revenue projections are based on the load forecast, existing rates, and future rate increases. The forecast includes adopted base rate increases of 3% per year in 2024 and 2025, and 3.5% per year from 2026 to 2028. The existing electric rates allow LUS to pass the direct MISO power cost, fuel cost, certain LPPA costs, environmental costs, purchased power costs, and other eligible cost directly to consumers in the form of a fuel charge that is adjusted regularly. This mechanism greatly reduces risk to LUS. LUS's largest expense is associated with the cost to purchase and generate power for the electric utility system. Burns & McDonnell prepared an updated long term forecast of fuel cost, purchased power cost, and wholesale market revenues in 2023 which is included in the financial projections with assumptions described later in this report. Fixed expense projections associated with operating the generating units are based on historical average levels with escalation. Variations in variable purchased power costs are directly covered by the fuel charge billed to customers. Other electric utility fixed costs such as transmission, distribution, customer costs, A&G expenses, and debt service are recovered through LUS's base electric rates.

9.4.1 Wastewater System Revenue and Expense Projections

The long-term forecast assumes that the number of customers in the wastewater utility will grow at approximately 0.4 percent per year over the next 10 years. Adopted wastewater rate increases of 9.5% per year in 2024 through 2025 and projected wastewater rate increases of 5% from 2027 through 2032 are assumed for the wastewater utility over the forecast. Wastewater operating expenses include treatment, collection, customer, and A&G expense with water treatment being the largest. These expense projections are generally based on historical average levels with escalation. Some variable production expenses are escalated based on volumes and changes to electric rates. The wastewater system recovers increase in expenses through periodic rate increases that are approved in rate studies.

9.5 Water Revenue and Expense System Projections

The long-term forecast assumes that the number of customers in the water utility will grow at approximately 0.4 percent per year over the next 10 years. Adopted water rate increases of 8% per year from 2024 through 2025 and projected water rate increases of 5% per year from 2027 through 2032 are assumed for the water utility over the forecast. Wholesale water sales are projected to continue to grow over the forecast period with 10% in 2024, 9% in 2025, 8% in 2026, and then 8% rate increases assumed every other year beginning in 2028. Water operating expenses include production, distribution, customer, and A&G expense with water production being the largest. These expense projections are generally based on historical average levels with escalation. Some variable production expenses are escalated based on volumes and changes to electric rates. The water system recovers increase in expenses through rate increases that are approved in rate studies.

9.6 Debt Service Projections

As of the date of this Report, LUS debt service includes the existing Series 2017 Bonds, Series 2019 Bonds, Series 2021 Bonds, and Series 2023 Bonds. Future new electric utility debt service includes a $187 million bond issue in FY 2025 and $215 million in FY 2027 to fund the new Bonin 4 gas turbine power plant. Future new wastewater utility debt service includes $46.6 million to fund major projects at the south plant. The LUS projected debt service coverage ratio exceeds the minimum requirement of 1.0.

9.7 Other Expense Projections

Other expenses include ILOT, normal capital and special equipment, and other miscellaneous expenses. Normal capital and special equipment are projected based on the 2023 budget and escalated for inflation.

9.8 In Lieu of Tax

The ILOT calculation provides for an ILOT payment equal to 12 percent of the Receipts Fund deposits. To be eligible to make the ILOT payment, LUS must first pass an ILOT Test. The ILOT test ensures that the Utilities System retains sufficient cash to meet capital obligations. If cash available after payment of operating expenses and debt service, less 7.5 percent of the Non-fuel Revenues, is greater than 12 percent of the Receipts Fund, LUS passes the test and makes the ILOT payment to the City. If LUS fails the ILOT test, LUS pays the cash available after debt service less 7.5 percent of the Non-fuel Revenues.

9.9 Capital Improvement Programs

The projections include the LUS CIP which reflects capital projects designed to upgrade, renew, and expand the system to meet customer growth requirements. In this Report, the capital plan for years 2024 through 2028 was based on the budget provided to Burns & McDonnell on February 23, 2024. The capital plan for 2029 through 2033 is based on historical levels. The five-year CIP is updated annually.

9.10 Bond Reserve Fund and Cash Available

Cash available reflects the remaining funds available to LUS once all other credit obligations of LUS are satisfied. LCG has a financial objective that requires a minimum cash balance of $8,000,000 to be held in an Operation and Maintenance Fund. The Operation and Maintenance Fund resides in the Operating Fund providing a cash reserve to meet system O&M expense requirements. Once O&M expense and debt service obligations are met by LUS, accumulated cash balances are held in a Capital Additions Fund and are applicable to capital projects or other lawful uses. The Period assumes that capital additions for LUS will be paid with a combination of cash balances available in the Capital Additions Fund and new debt.

9.11 Cross Reference

The following table is provided to assist in cross referencing the information contained in the Continuing Disclosures with the information contained in this Report.

Table 9-1: City of Lafayette, Utilities Revenue Refunding Bonds, Series 2012

Official Statement	Official Statement Page	Official Statement Table	Report Reference
Trends in Finances	35	LCG, LUS Income Statements	Table 9-5
	36	Historical Debt Service Coverage Calculation	Table 3-3

Table 9-2: City of Lafayette, Utilities Revenue Refunding Bonds, Series 2017

Official Statement	Official Statement Page	Official Statement Table	Report Reference
Trends in Finances	36	LCG, LUS Income Statements	Table 9-5
	37	Historical Debt Service Coverage Calculation	Table 3-3

Table 9-3: City of Lafayette, Utilities Revenue Bonds, Series 2019

Official Statement	Official Statement Page	Official Statement Table	Report Reference
Trends in Finances	38	LCG, LUS Income Statements	Table 9-5
	39	Historical Debt Service Coverage Calculation	Table 3-3

Table 9-4: City of Lafayette, Taxable Utilities Revenue Refunding Bonds, Series 2021

Official Statement	Official Statement Page	Official Statement Table	Report Reference
	24	Electric System Largest Retail Customers	Table 10-9
	25	Historical Electric System Retail and Wholesale Sales	Table 4-1
	29	Wastewater System Largest Retail Customers	Table 10-11
	29	Historical Wastewater System Retail Collection	Table 6-1
	33	Water System Largest Retail Customers	Table 10-10
	34	Historical Water System Retail and Wholesale Sales	Table 5-1
	35	Electric System Rate Summary	Table 4-26
	35	Electric System Customer Class Statistics	Table 4-28
	36	Electric Residential Rate Comparison	Table 4-22
	36	Electric Commercial Rate Comparison	Table 4-23
	37	Wastewater System Rate Summary	Table 6-17
	37	Water System Rate Summary	Table 5-24
Trends in Finances	38	LCG, LUS Income Statements	Table 9-5
	39	Historical Debt Service Coverage Calculation	Table 3-3

Table 9-5: City of Lafayette, Utilities Revenue Bonds, Series 2023

Official Statement	Official Statement Page	Official Statement Table	Report Reference
	28	Electric System Largest Retail Customers	Table 10-9
	29	Historical Electric System Retail and Wholesale Sales	Table 4-1
	33	Wastewater System Largest Retail Customers	Table 10-11
	33	Historical Wastewater System Retail Collection	Table 6-1
	37	Water System Largest Retail Customers	Table 10-10
	38	Historical Water System Retail and Wholesale Sales	Table 5-1
	39	Electric System Rate Summary	Table 4-26
	40	Electric System Customer Class Statistics	Table 4-28
	40	Electric Residential Rate Comparison	Table 4-22
	41	Electric Commercial Rate Comparison	Table 4-23
	43	Wastewater System Rate Summary	Table 6-17
	43	Water System Rate Summary	Table 5-24
Trends in Finances	44	LCG, LUS Income Statements	Table 9-5
	45	Historical Debt Service Coverage Calculation	Table 3-3

Table 9-6: LUS Income Statements

	2019	2020	2021	2022	2023
Operating Revenues					
Electric	104,141,323	99,722,977	102,935,936	103,630,720	107,481,579
Electric Retail Fuel Adjustment	73,101,002	65,117,850	76,344,759	121,702,909	90,956,868
Water	20,524,232	21,144,642	21,710,500	22,574,345	25,078,861
Wastewater	30,911,782	30,396,508	31,513,318	31,714,091	35,012,172
Fiber	0	0	0	0	0
Total Operating Revenues	228,678,339	216,381,978	232,504,512	279,622,064	258,529,479
Operating Expenses					
Electric Fuel & Purch Power	79,275,605	74,047,342	90,256,316	132,013,586	100,590,843
Electric Other Production	5,097,410	3,606,585	4,997,512	4,439,140	5,202,959
Other Electric	35,027,667	34,390,320	33,832,947	31,550,983	30,657,873
Water	14,227,206	13,159,106	13,833,990	15,000,437	17,071,411
Wastewater	19,211,514	18,295,187	19,791,589	20,606,263	20,924,121
Fiber	0	0	0	0	0
Total Operating Expenses	152,839,402	143,498,541	162,712,354	203,610,408	174,447,206
Net Operating Revenues	75,838,938	72,883,437	69,792,158	76,011,656	84,082,273
Depreciation	25,130,355	25,189,698	24,589,046	25,244,789	26,609,996
Other Income					
Interest Income	4,695,793	2,904,807	1,020,016	2,055,587	6,509,808
Unrealized Gain/Loss on Invs	399,671	(139,572)	(128,924)	(1,471,006)	758,472
Amortization of Debt Premium	3,639,998	3,769,742	3,555,219	2,018,191	1,724,995
Water Tapping Fees	56,760	61,540	71,460	63,520	88,680
Communications Lease Income	0	11,379	0	7,906	3,953
Contributions in Aid of Construction	0	140,856	0	150,700	30,188
Misc. Non Operating Revenue	3,141,166	3,633,306	2,412,390	4,330,861	5,728,197
Total Other Income	11,933,388	10,382,059	6,930,161	7,155,760	14,844,292
Other Expenses					
Loss on Disposition of Property	309,767	290,397	507,437	255,880	699,620
Interest Expense	10,362,925	11,184,000	10,535,600	7,416,091	6,705,100
Amortization on Plant	600,810	488,306	395,280	316,571	243,669
Amortization - Other	1,586,946	1,498,590	1,405,838	511,011	383,458
Interest on Customer Deposits	5,331	1,834	1,897	1,927	978
Tax Collections/Non Operating	0	0	0	0	0
Misc Non Operating Expense	3,369,807	3,649,380	1,576,322	2,408,295	690,830
	16,235,585	17,112,507	14,422,373	10,909,776	8,723,655
Net Income Before in Lieu of Tax	46,406,385	40,963,291	37,710,900	47,012,850	63,592,915
ILOT	25,051,002	24,679,711	24,056,012	24,185,667	25,432,565
Net Income	21,355,383	16,283,580	13,654,888	22,827,183	38,160,349
Net Positions, Beginning as Restated	519,350,066	540,705,447	556,989,025	570,657,116	593,135,500
Net Positions, Ending (1), (2), (3)	540,705,447	556,989,025	570,643,913	593,484,298	631,295,849

Source: LUS and Official Statement

(1) Net position year beginning balance was restated each year
(2) Year-end FY 2021 ending balance was adjusted by $13,201 due to the implementation of GASB 87
(3) Year-end FY 2022 ending balance was adjusted by $348,798 due to the implementation of GASB 96

10.0 CONTINUING DISCLOSURES – LPPA

10.1 Introduction

Government entities that issue bonds must enter into a continuing disclosure agreement to be in compliance with the SEC Rule 15c2-12. As part of the continuing disclosure agreement, the issuer promises to provide certain annual financial information and material event notices to the public. These filings must be made electronically at the EMMA portal (www.emma.msrb.org). LPPA had the following outstanding debt as of October 31, 2023:

- Electric Revenue Refunding Bonds, Series 2015
- Taxable Electric Revenue Refunding Bonds, Series 2021

The continuing disclosure agreements for the outstanding bonds require that specific tables contained in the Official Statements must be updated annually. This section contains these required tables. This section contains forward looking financial statements based on Burns & McDonnell's current expectations and projections about future events and financial trends regarding LPPA. Projections as contained herein reflect estimates of what might occur in the future based on the information available to us as of the date of this Report. Burns & McDonnell cannot predict the future or guarantee future financial performance of LPPA. To the extent that assumptions used in these projections vary from those actually observed, financial performance as presented herein will vary from actual performance. Burns & McDonnell prepared a 10-year projection of financial and operating data for LPPA. Projections are based on Burns & McDonnell's review of historical operating results, CLECO's budgets, visual observations of the LPPA assets, and other assumptions and considerations as listed in the Report. The projections prepared by Burns & McDonnell are for the Projected Period of November 1, 2023, through October 31, 2033. LUS provided actual historical data for the 2019 through 2023 period.

10.2 Information and Assumptions Relied Upon

10.3 Revenue Projections

LPPA projected revenues reflect the full cost recovery per the PSC. Therefore, revenues are equivalent to debt service, capital, and meeting reserve requirements.

10.4 Expense Projections

LPPA's largest expense is its fuel cost. Rodemacher Unit 2 is economically dispatched into the MISO market. The projected fuel expense used in the forecast is based on Burns & McDonnell's forecast update completed in 2023. The forecast utilized various assumptions to dispatch the unit using fuel pricing from

LUS and market prices. Rodemacher Unit 2 will be shut down at the end of 2027. The Bonin 4 gas turbine power plant is planned to replace Rodemacher Unit 2's capacity in 2028. The other non-fuel operating expenses for LPPA were provided by CLECO through 2028. The forecast assumes that the plant is retired in 2028 with minimal continued operating expenses thereafter. Burns & McDonnell and LUS reduced the budgeted expenses provided by CLECO in 2028 since the unit will be shut down in 2027. At the time of this report, CLECO and the other Joint Owners have all decided to retire the unit at the end of 2027 but are still developing the detailed decommissioning plan for the plant in 2028.

10.5 Debt Service

LPPA fuel, O&M expenses, debt service associated with MATS upgrades, and debt service associated with rail cars are included in the LUS FC calculation. In 2023, approximately 85 percent of LPPA debt service was passed through Schedule FC. LUS Electric System base rates recover the remaining LPPA debt service obligation. LPPA debt service has included the Series 2012 Bonds and Series 2015 Bonds through the end of FY 2021. Beginning in FY 2022 the debt service associated with the Series 2012 Bonds was replaced with the Series 2021 Bonds debt service. Projected operating results assume no future bond issues to meet LPPA capital requirements. The debt service coverage ratio meets the minimum requirement of 1.0. Because LUS pays 100 percent of LPPA costs, Operating Revenues, provided exclusively from LUS, generally equal Operating Costs including expenses, debt service, and capital spending. To the extent that DSC is greater than 1.0, any available cash is applied to capital projects.

10.6 Capital Improvement Programs

During the Projected Period, the LPPA CIP reflects capital projects designed to maintain the assets for reliability and environmental compliance until it is closed in 2028. The capital projects include low baghouse bag and cage replacements, rotating air port upgrades on the coal pulverizers, boiler insulation repair, CCR compliance asset retirement obligation, and other small projects related to reliability or improving performance. The LPPA 5-year CIP provided to Burns & McDonnell by Cleco, with LUS and Burns & McDonnell 2028 adjustments, is $6.9 million.

10.7 Bond Reserve Fund and Cash Available

LPPA's current Bond Reserve Fund Balance is approximately $6.92 million as required by the bond ordinance. LPPA also maintains a Reserved and Contingency Fund of approximately $5.29 million and a Fuel Cost Stability Fund of approximately $4.5 million.

10.8 Cross Reference

The following table is provided to assist in cross referencing the information contained in the Continuing

Disclosures with the information contained in this Report.

Table 10-1: LPPA Electric Revenue Bonds, Series 2012

Official Statement	Official Statement Page	Official Statement Table	Report Reference
Debt Service Requirements	4	Series 2012 Bonds Debt Service	Table 10-4
Summary of Historical Operating Results	18	LPPA Historical Operating Results	Table 10-6
Trends in Finances	19	LPPA Summary Statements of Revenues, Expenses and Changes in Fund Net Assets	Table 10-7
	20	LPPA Summary Statements of Cash Flows	Table 10-8
Unit 2, page 22-33	24	Unit No. 2 Operating Statistics	Table 4-13
	25	Annual Operating Expenses – LPPA's Share of Unit No. 2	Table 10-5
City of Lafayette Utilities System, page 33-57	40	Electric System Largest Retail Customers	Table 10-9
	40	Historical Electric Retail and Wholesale Sales	Table 4-1
	41	Proposed Electric System Facilities (Five Year Plan)	Table 3-5
	42	Electric Sales and Revenue Forecast	Table 10-13
	43	Electric System Operations and Maintenance Expense Forecast	Table 10-14
	44	Wastewater System Largest Retail Customers	Table 10-11
	45	Historical Wastewater Retails Flows (000 Gallons)	Table 6-1
	45	Proposed Wastewater System Facilities (Five Year Plan)	Table 3-5
	46	Wastewater Sales and Revenue	Table 10-15
	47	Wastewater System Operations and Maintenance Expense Forecast	Table 10-16
	49	Water System Largest Retail Customers	Table 10-10
	49	Historical Water Retail and Wholesale Sales	Table 10-17
	50	Proposed Water System Facilities (Five Year Plan)	Table 3-5
	51	Water Sales and Revenue Forecast	Table 10-17
	51	Water System Operations and Maintenance Expense Forecast	Table 10-17
	52	Electric System Sales and Revenues by Rate Class	Table 4-28, Table 4-2
	53	Electric Residential Rate Comparison	Table 4-22
	53	Electric Commercial Rate Comparison	Table 4-23
	56	Lafayette Utilities Systems Income Statements	Table 9-5
	57	Summary Statement of Revenues, Expenses, and Changes in Fund Net Assets	Table 10-12, Table 9-5
Appendix B-Financial & Statistical Data	B-3	Summary Debt Statement	See Section 12

Table 10-2: LPPA Electric Revenue Refunding Bonds, Series 2015

Official Statement	Official Statement Page	Official Statement Table	Report Reference
Debt Service Requirements	5	Series 2015 Bonds Debt Service	Table 10-4
Summary of Historical Operating Results	18	LPPA Historical Operating Results	Table 10-6
Trends in Finances	19	LPPA Summary Statements of Revenues, Expenses and Changes in Fund Net Position	Table 10-7
	20	LPPA Summary Statements of Cash Flows	Table 10-8
Rodemacher Unit 2, page 22-33	23	Rodemacher Unit No. 2 Operating Statistics	Table 4-13
	24	Annual Operating Expenses – LPPA's Share of Unit No. 2	Table 10-5
City of Lafayette Utilities System, page 33-57	39	Electric System Sales and Revenues by Rate Class	Table 4-28, Table 4-2
	40	Electric System Residential Rate Comparison	Table 4-22
	40	Electric System Commercial Rate Comparison	Table 4-23
	41	Historical and Projected Electric Retail and Wholesale Sales	Table 4-1, Table 10-13
	42	Historical and Projected Electric Sales and Revenue Forecast	Table 10-13
	43	Historical and Projected Electric System Operations and Maintenance Expense Forecast	Table 10-14
	46	Wastewater System Largest Retail Customers	Table 10-11
	46	Wastewater System Residential Rate Comparison	Table 6-13
	47	Wastewater System Commercial Rate Comparison	Table 6-14
	47	Historical & Projected Wastewater Retail Collection	Table 10-15
	48	Wastewater Historical Sales & Projected Revenue Forecast	Table 10-15
	49	Wastewater System Historical and Projected Operation and Maintenance Expense	Table 10-16
	51	Water System Largest Retail Customers	Table 10-10
	52	Water System Residential Rate Comparison	Table 5-20
	52	Water System Commercial Rate Comparison	Table 5-21
	53	Historical & Projected Water Retail and Wholesale Sales	Table 10-17
	54	Water Sales and Revenue Forecast	Table 10-17
	55	Water System Historical and Projected Expense	Table 10-18
	57	Lafayette Utilities Systems Income Statements	Table 9-5
	58	Summary Statement of Revenues, Expenses, and Changes in Fund Net Position	Table 10-12
Appendix B-Financial & Statistical Data	B-4	Summary Debt Statement	See Section 12

Table 10-3: Taxable LPPA Electric Revenue Refunding Bonds, Series 2021

Official Statement	Official Statement Page	Official Statement Table	Report Reference
Summary of Historical Operating Results	18	LPPA Summary of Historical Operating Results	Table 10-6
Trends in Finances	19	LPPA Summary Statements of Revenues, Expenses and Changes in Fund Net Position	Table 10-7
	20	LPPA Statements of Cash Flows	Table 10-8
Unit 2, page 22-33	24	Rodemacher Unit 2 Operating Statistics	Table 4-13
	26	Annual Operating Expenses – LPPA's Share of Unit No. 2	Table 10-5
City of Lafayette Utilities System, page 32-57	35	Utilities System Capital Improvement Program	Table 3-5
	41	Electric System Largest Retail Customers	Table 10-9
	42	Historical Electric Retail and Wholesale Sales	Table 4-1
	42	Electric System Rates Summary	Table 4-26
	43	Electric System Customer Class Statistics	Table 4-28
	43	Electric Residential Rate Comparison	Table 4-22
	44	Electric System Commercial Rate Comparison	Table 4-23
	48	Wastewater System Largest Retail Customers	Table 10-11
	49	Historical Wastewater Retails Flows (1000 Gallons)	Table 6-1
	49	Wastewater System Rate Summary	Table 6-17
	53	Water System Largest Retail Customers	Table 10-10
	54	Historical Water Retail and Wholesale Sales	Table 10-17
	55	Water System Rate Summary	Table 5-24
Utility System Trends in Finances	56	Lafayette Utilities Systems Income Statements	Table 9-5
	57	Utilities System Historical Debt Service Coverage	Table 3-3
Appendix B-Financial & Statistical Data	B-3	Summary Debt Statement	See Section 12

Table 10-4: Debt Service Requirements

	Series 2007 Bonds		Series 2012 and Series 2021 Bonds [1]		Series 2015 Bonds		Total Debt Service Requirement		
Due Date	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Total
11/1/2014	$605,000	$737,078	$2,255,000	$1,362,975	$0	$0	$2,860,000	$2,100,053	$4,960,053
5/1/2015	$0	$724,978	$0	$1,329,150	$0	$0	$0	$2,054,128	$2,054,128
11/1/2015	$630,000	$724,978	$2,325,000	$1,329,150	$0	$0	$2,955,000	$2,054,128	$5,009,128
5/1/2016	$0	$26,900	$0	$1,282,650	$0	$532,936	$0	$1,842,486	$1,842,486
11/1/2016	$660,000	$26,900	$2,415,000	$1,282,650	$90,000	$571,003	$3,165,000	$1,880,553	$5,045,553
5/1/2017	$0	$13,700	$0	$1,234,350	$0	$570,103	$0	$1,818,153	$1,818,153
11/1/2017	$685,000	$13,700	$2,510,000	$1,234,350	$95,000	$570,103	$3,290,000	$1,818,153	$5,108,153
5/1/2018	$0	$0	$0	$1,184,150	$0	$569,153	$0	$1,753,303	$1,753,303
11/1/2018	$0	$0	$2,610,000	$1,184,150	$800,000	$569,153	$3,410,000	$1,753,303	$5,163,303
5/1/2019	$0	$0	$0	$1,131,950	$0	$561,153	$0	$1,693,103	$1,693,103
11/1/2019	$0	$0	$2,715,000	$1,131,950	$815,000	$561,153	$3,530,000	$1,693,103	$5,223,103
5/1/2020	$0	$0	$0	$1,104,800	$0	$548,928	$0	$1,653,728	$1,653,728
11/1/2020	$0	$0	$2,770,000	$1,104,800	$845,000	$548,928	$3,615,000	$1,653,728	$5,268,728
5/1/2021	$0	$0	$0	$1,049,400	$0	$536,253	$0	$1,585,653	$1,585,653
11/1/2021	$0	$0	$2,880,000	$1,049,400	$865,000	$536,253	$3,745,000	$1,585,653	$5,330,653
5/1/2022	$0	$0	$0	$448,131	$0	$523,278	$0	$971,410	$971,410
11/1/2022	$0	$0	$3,464,875	$412,185	$900,000	$523,278	$4,364,875	$935,463	$5,300,338
5/1/2023	$0	$0	$0	$408,235	$0	$505,278	$0	$913,513	$913,513
11/1/2023	$0	$0	$3,520,000	$408,235	$930,000	$505,278	$4,450,000	$913,513	$5,363,513
5/1/2024	$0	$0	$0	$373,035	$0	$486,678	$0	$859,713	$859,713
11/1/2024	$0	$0	$3,575,000	$373,035	$970,000	$486,678	$4,545,000	$859,713	$5,404,713
5/1/2025	$0	$0	$0	$337,285	$0	$467,278	$0	$804,563	$804,563
11/1/2025	$0	$0	$3,640,000	$337,285	$1,010,000	$467,278	$4,650,000	$804,563	$5,454,563
5/1/2026	$0	$0	$0	$300,885	$0	$442,028	$0	$742,913	$742,913
11/1/2026	$0	$0	$3,710,000	$300,885	$1,065,000	$442,028	$4,775,000	$742,913	$5,517,913
5/1/2027	$0	$0	$0	$263,785	$0	$415,403	$0	$679,188	$679,188
11/1/2027	$0	$0	$3,780,000	$263,785	$1,105,000	$415,403	$4,885,000	$679,188	$5,564,188
5/1/2028	$0	$0	$0	$225,985	$0	$398,828	$0	$624,813	$624,813
11/1/2028	$0	$0	$3,855,000	$225,985	$1,140,000	$398,828	$4,995,000	$624,813	$5,619,813
5/1/2029	$0	$0	$0	$187,435	$0	$381,016	$0	$568,451	$568,451
11/1/2029	$0	$0	$3,925,000	$187,435	$4,325,000	$381,016	$8,250,000	$568,451	$8,818,451
5/1/2030	$0	$0	$0	$145,241	$0	$272,891	$0	$418,132	$418,132
11/1/2030	$0	$0	$4,055,000	$145,241	$4,505,000	$272,891	$8,560,000	$418,132	$8,978,132
5/1/2031	$0	$0	$0	$99,623	$0	$199,684	$0	$299,307	$299,307
11/1/2031	$0	$0	$4,105,000	$99,623	$4,690,000	$199,684	$8,795,000	$299,307	$9,094,307
5/1/2032	$0	$0	$0	$51,389	$0	$82,434	$0	$133,823	$133,823
11/1/2032	$0	$0	$4,195,000	$51,389	$4,885,000	$82,434	$9,080,000	$133,823	$9,213,823
5/1/2033	$0	$0	$0	$0	$0	$0	$0	$0	$0
11/1/2033	$0	$0	$0	$0	$0	$0	$0	$0	$0

Source: LUS and Official Statement

[1] The Series 2012 Bonds were refunded with the Series 2021 Bonds in FY 2022.

Table 10-5: Annual Operating Expenses – LPPA Share of Unit No. 2

	2019	2020	2021	2022	2023
LPPA Share (MWh)	1,045,878	656,054	994,006	935,616	740
Fuel	$27,808,739	$19,288,183	$27,019,447	$35,240,650	$30,202,223
Operations	2,731,655	3,237,018	3,409,812	3,630,381	3,164,949
Maintenance	5,357,042	6,075,341	6,485,536	4,724,001	4,717,751
Administrative & General	2,793,274	2,744,099	2,966,553	3,164,034	3,642,348
Total Operating Expenses	$38,690,711	$31,344,641	$39,881,348	$46,759,066	$41,727,270
Total Operating Expenses ($/MWh)	36.99	47.78	40.12	49.98	56,402.57
Total Operating Expenses Less Fuel ($/MWh)	10.40	18.38	12.94	12.31	15,578.36

Source: LPPA Manager's Monthly Reports

Table 10-6: LPPA Historical Revenues, Expenses, Balances Available for Debt Service

	2019	2020	2021	2022	2023
Total Operating Revenues	$47,202,751	$37,491,409	$50,049,857	$57,135,203	$53,935,067
Total Operating Expenses	38,690,711	31,344,641	39,881,348	46,759,065	41,727,270
Net Operating Revenues	$8,512,040	$6,146,768	$10,168,509	$10,376,138	$12,207,797
Other Income	$1,035,324	$317,785	$41,070	$304,892	$1,086,668
Balance Available for Debt Service	$9,547,364	$6,464,553	$10,209,579	$10,681,029	$13,294,465
Debt Service	6,916,206	6,922,456	6,916,306	6,271,748	6,277,026
Balance After Debt Service	$2,631,158	($457,903)	$3,293,273	$4,409,282	$7,017,439
Debt Service Coverage Ratio (1)	1.4	0.9	1.5	1.7	2.1

Source: LPPA Manager's Monthly Reports

(1) Debt service includes Series 2007, 2012, 2015, and 2021 bonds. In 2015, LPPA refunded the majority of the 2007 bonds. The Series 2007 Bonds final payment was November 1, 2017. The Series 2012 Bonds were refunded with the Series 2021 Bonds November 1, 2021. Due to a surplus in LPPA's cash balance, the Administration elected not to bill LUS for $4.5 million of LPPA's capital expenditures in FY 2020. This resulted in a $4.5 million decrease to LPPA's operating revenue, which in turn caused LPPA's debt service coverage ratio to drop below 1.0. This was a one-time adjustment for FY 2020 only.

Table 10-7: Summary of Revenues, Expenses, and Changes of Fund Net Position

	2019	2020	2021	2022	2023
Operating Revenues:					
Sales of Electric Energy					
City of Lafayette (LUS)	$47,202,751	$37,491,409	$50,049,857	$57,135,203	$53,935,067
Operating Expenses					
Production	$35,897,437	$28,600,542	$36,914,795	$43,595,031	$38,084,922
Administrative & General	2,793,274	2,744,099	2,966,553	3,164,034	3,642,348
Depreciation	2,314,996	2,354,239	2,278,011	2,318,325	2,399,345
Total Operating Expenses	$41,005,707	$33,698,880	$42,159,359	$49,077,390	$44,126,615
Non Operating Revenues (Expenses)					
Other	$631,584	$499,162	$492,006	($110,982)	$752,595
Investment Earnings	1,035,324	317,785	$41,070	304,892	1,086,668
Interest on Long Term Debt	(3,386,206)	(3,307,456)	($3,171,306)	(1,981,748)	(1,827,026)
Gain (Loss) on Property	73,948	0	$0	0	(274,503)
Total	($1,645,351)	($2,490,509)	($2,638,230)	($1,787,838)	($262,266)
Net Income (Loss) for the Period	$4,551,693	$1,302,020	$5,252,268	$6,269,975	$9,546,186
Fund Net Positions Beginning	$86,820,620	$91,372,314	$92,674,334	$97,926,601	$104,196,577
Fund Net Positions, End of Year	$91,372,314	$92,674,334	$97,926,601	$104,196,576	$113,742,763

Source: LPPA Manager’s Monthly Reports

Table 10-8: Summary Statements of Cash Flows

	2019	2020	2021	2022	2023
Cash Flows from Operating Activities					
Receipts from customers	$47,202,751	$37,491,409	$50,049,857	$56,403,726	$60,673,263
Payments to suppliers for goods & services	(42,037,771)	(33,645,024)	(33,361,779)	(50,124,198)	(50,981,769)
Payments to employees and for employee related costs	(437,879)	(413,642)	(471,979)	(489,798)	(484,520)
Net cash provided (used) by operating activities	$4,727,101	$3,432,743	$16,216,099	$5,789,730	$9,206,974
Cash Flows from Capital and Related Financing Activities					
Proceeds from Issuance of Bonds	$0	$0	$0	$38,971,020	$0
Premium on issuance on bonds	0	0	0	0	0
Payment to escrow agent	0	0	0	(41,435,727)	0
Principal payments on bonds	(3,530,000)	(3,615,000)	(3,745,000)	(4,290,000)	(4,450,000)
interest paid	(3,386,206)	(3,307,455)	(3,171,306)	(1,981,748)	(1,827,025)
Debt issuance costs	0	0	0	0	0
Preliminary survey investigation costs paid	0	0	0	0	0
Proceeds from redesignation of capital assets	0	0	0	0	0
Purchase and construction of capital assets	(1,786,815)	(2,901,295)	(4,566,665)	(3,222,469)	(7,591,168)
Net cash provided (used) by capital and related financing activity	($8,703,021)	($9,823,750)	($11,482,971)	($11,958,924)	($13,868,193)
Cash Flows from Investing Activities					
Sales (purchases) of investments - net	$11,631,137	($1,889,563)	$1,555,412	$1,933,549	$1,039,592
Maturities of Investments	0	0	0	0	0
Interest Earnings	1,013,331	343,193	34,196	268,120	1,089,042
Other	0	0	0	0	0
Net Cash provided by investing activities	12,644,468	(1,546,370)	1,589,608	2,201,669	2,128,634
Net increase (decrease) in cash and cash equivalents	$8,668,548	($7,937,377)	$6,322,736	($3,967,525)	($2,532,585)
Cash and cash equivalents, beginning of year	$26,295,434	$34,963,982	$27,026,605	$33,349,341	$29,381,816
Cash and cash equivalents, end of year	$34,963,982	$27,026,605	$33,349,341	$29,381,816	$26,849,231

Source: LPPA Financial Report

Table 10-9: 2023 Large Customers – Electric

Customer	Type of Business	Revenues
University of Louisiana	Higher Education	$13,470,791
Lafayette General Hospital	Health Care	$3,359,888
Our Lady Of Lourdes	Health Care	$1,816,314
Lafayette Consolidated Gov-Street L	Local Government	$1,257,117
Stuller Inc.	Jewelry Manufacturing	$1,113,396
Halliburton Gulf Coast Campus	Refining / Petrochemical	$904,133
University Hospital & Clinics Inc	Health Care	$784,213
Our Lady Of Lourdes Women's & Ch	Health Care	$718,167
Borden Company	Dairy Products	$706,090
International Paper	Paper Products	$695,006

Source: LUS

Table 10-10: 2023 Large Customers – Water

Customer	Type of Business	Revenues
University of Louisiana	Higher Education	$369,499
Lafayette General Hospital	Health Care	$201,273
Our Lady Of Lourdes	Health Care	$129,762
Lafayette Parish Correctional Center	Correctional Facility	$69,646
Lafayette Consolidated Gov - WW Pl	Local Government	$46,274
University Hospital & Clinics Inc	Health Care	$43,756
Emberwood Apartments	Apartment Complex	$42,287
Our Lady Of Lourdes Women's & Ch	Health Care	$40,896
Lafayette General Southwest	Health Care	$40,118
Acadian Point Apartments	Apartment Complex	$39,932

Source: LUS

Table 10-11: 2023 Large Customers – Wastewater

Customer	Type of Business	Revenues
University of Louisiana	Higher Education	$931,376
Lafayette General Hospital	Health Care	$370,943
Lafayette Parish Correctional Cente	Correctional Facility	$216,139
Westport Linen Services	Commercial Laundry	$167,694
Housing Authority	Public Housing	$152,428
Bayou Shadows Apartments	Apartment Complex	$129,390
Emberwood HC4 LLC	Apartment Complex	$126,097
Our Lady Of Lourdes	Health Care	$124,715
Magnolia View Property Inc	Mobile Home Park	$116,135
Pinhook South Apartments	Apartment Complex	$114,867

Source: LUS

Table 10-12: Summary Statement of Revenue, Expenses, and Changes in Fund Net Position City of Lafayette, Five Years Ending October 31

	2019	2020	2021	2022	2023
Operating Revenues					
Charges for Services	$224,216,058	$213,915,365	$229,562,977	$275,891,140	$254,427,186
Miscellaneous	5,284,370	3,078,979	3,076,324	5,085,804	4,960,404
Total Operating Revenues	$229,500,428	$216,994,344	$232,639,301	$280,976,944	$259,387,590
Operating Expenses					
Production, Collection, & Cost of Services	$95,182,077	$87,551,122	$105,998,201	$147,544,578	$117,235,586
Transmission, Distribution & Treatment	30,327,322	27,780,290	27,094,443	23,298,950	23,911,667
Administrative & General & Customer	27,330,002	28,167,129	29,587,642	32,635,183	33,297,658
ILOT	25,051,002	24,679,711	24,056,012	24,185,668	25,432,565
Depreciation & Amortization on Plant	25,731,165	25,678,004	24,984,326	25,663,986	26,854,738
Total Operating Expenses	$203,621,568	$193,856,256	$211,720,624	$253,328,365	$226,732,214
Operating Income	$25,878,860	$23,138,088	$20,918,677	$27,648,579	$32,655,376
Non Operating Revenues (Expenses)					
Investment Earnings	$5,095,464	$2,765,235	$891,092	$620,618	$7,268,280
Interest Expense	(8,315,204)	(8,914,681)	(10,537,496)	(5,939,910)	(5,364,541)
Bond Issuance and Amortization of debt premium and loss on refundings net	(1,052,697)	0	2,149,380	(1,024,546)	0
Gain (Loss) on sale/disposal of assets	(309,767)	(290,397)	(507,437)	(255,880)	(698,101)
Federal and State Grant Revenue	1,031,268	4,295,576	4,089,440	751,148	2,005,605
Hurricane/Flood Expenses	(1,315,835)	(5,667,070)	(4,282,872)	(718,626)	(94,749)
Non Employer Pension Contribution	549,266	580,344	624,706	636,071	616,920
Other	(173,356)	200,856	330,224	317,389	1,687,519
Total Non Operating Revenues (Expenses)	($4,490,861)	($7,030,137)	($7,242,963)	($5,613,736)	$5,420,933
Income Before Contributions	$21,387,999	$16,107,951	$13,675,714	$22,034,843	$38,076,309
Capital Contributions and Transfers In (Out)	($32,618)	$175,627	($20,826)	$641,639	$84,040
Change in Net Positions	$21,355,381	$16,283,578	$13,654,888	$22,827,182	$38,160,349
Net Positions, Beginning as Restated	$519,350,066	$540,705,447	$556,989,025	$570,657,116	$593,135,500
Net Positions, Ending (1), (2), (3)	$540,705,447	$556,989,025	$570,643,913	$593,484,298	$631,295,849

Source: LCG Annual Comprehensive Financial Report

(1) Net position year beginning balance was restated each year
(2) Year-end FY 2021 ending balance was adjusted by $13,201 due to the implementation of GASB 87
(3) Year-end FY 2022 ending balance was adjusted by $348,798 due to the implementation of GASB 96

Table 10-13: Electric System Historical and Projected Sales and Revenue

FY	Retail Sales (MWh)	Retail Sales: Base Rate Revenue	Retail Sales: FC Revenue	Other Revenue	Total Operating Revenue
2019	2,004,310	$100,836,993	$73,101,002	$6,027,891	$179,965,886
2020	1,917,040	$97,878,860	$65,117,850	$3,470,810	$166,467,519
2021	1,959,364	$99,763,119	$76,344,759	$3,744,026	$179,851,903
2022	1,981,782	$100,740,765	$121,702,909	$4,020,528	$226,464,201
2023	2,047,185	$104,240,922	$90,956,868	$6,625,757	$201,823,546
2024	2,026,634	$107,654,428	$82,950,130	$6,231,057	$196,835,614
2025	2,038,288	$111,645,888	$88,665,541	$6,333,730	$206,645,160
2026	2,049,984	$116,346,551	$86,755,314	$7,139,529	$210,241,393
2027	2,061,719	$121,243,972	$88,344,679	$7,554,132	$217,142,783
2028	2,073,497	$126,345,624	$99,735,207	$7,472,818	$233,553,650
2029	2,085,301	$127,209,250	$99,760,787	$7,077,911	$234,047,948
2030	2,097,128	$128,078,379	$101,584,885	$6,625,813	$236,289,078
2031	2,108,975	$128,952,715	$104,647,333	$6,958,866	$240,558,913
2032	2,120,848	$129,832,797	$106,424,144	$7,283,526	$243,540,466
2033	2,134,349	$130,810,392	$102,427,416	$7,607,610	$240,845,417
Average Growth	0.6%	2.2%	2.4%	2.2%	2.3%

Source: LUS and Burns & McDonnell projections
(1) Projections based on Burns & McDonnell load forecast.
(2) Base rate revenue projections include adopted 3.0% base rate increases in 2024 and 2025.
(3) Base rate revenue projections include adopted 3.5% base rate increases in 2026, 2027, and 2028.
(4) Other revenue includes miscellaneous operation revenue and interest income.

Table 10-14: Electric System Historical and Projected Operating Expenses

FY	Production	Transmission	Distribution	Customer Accounts, Service & Sales	Administrative & General	Total Operating Expenses
2019	$84,373,015	$8,612,596	$11,837,879	$2,690,275	$11,886,918	$119,400,682
2020	$77,653,928	$8,438,158	$10,990,219	$2,742,846	$12,219,098	$112,044,248
2021	$95,253,828	$7,103,445	$11,109,141	$3,406,175	$12,214,185	$129,086,775
2022	$136,452,725	$2,408,749	$11,906,957	$4,363,821	$12,871,455	$168,003,708
2023	$105,793,801	$1,416,040	$12,189,029	$3,584,758	$13,468,046	$136,451,675
2024	$101,456,153	$3,589,053	$12,293,944	$3,623,017	$13,804,951	$134,767,118
2025	$103,073,768	$3,682,009	$12,613,586	$3,737,251	$14,163,879	$137,270,493
2026	$100,734,236	$3,777,725	$12,941,539	$3,825,735	$14,532,140	$135,811,375
2027	$102,790,221	$3,875,838	$13,278,019	$3,932,004	$14,909,976	$138,786,058
2028	$117,258,735	$3,976,383	$13,623,248	$4,064,187	$15,297,635	$154,220,188
2029	$106,328,837	$4,079,399	$13,977,452	$4,162,538	$15,695,374	$144,243,601
2030	$108,153,578	$4,185,924	$14,340,866	$4,267,910	$16,103,454	$147,051,731
2031	$111,565,421	$4,294,996	$14,713,729	$4,378,948	$16,522,143	$151,475,236
2032	$113,517,040	$4,406,656	$15,096,286	$4,489,929	$16,951,719	$154,461,629
2033	$107,257,712	$4,520,945	$15,488,789	$4,590,647	$17,392,464	$149,250,556

Source: LUS and Burns & McDonnell projections
(1) Production expenses are based on 2023 Burns & McDonnell forecasts and incorporate solar PPAs and Bonin 4 generation.
(2) Transmission cost reduction in FY2022 was due to expiration of the Cleco transmission contract.
(3) Total Operating Expenses do not include ILOT, debt service, capital, or other expenses.

Table 10-15: Wastewater System Historical and Projected Retail Sales and Revenue

FY	Retail Sales (1000 gallons)	Retail Sales Revenue	Other Revenue	Total Operating Revenue
2019	5,746,278	$29,910,672	$2,128,101	$32,038,772
2020	5,498,088	$29,861,226	$1,261,483	$31,122,710
2021	6,328,515	$30,119,770	$1,648,552	$31,768,322
2022	5,043,306	$31,031,170	$1,217,374	$32,248,543
2023	5,312,157	$34,357,687	$2,477,231	$36,834,918
2024	5,884,570	$36,920,507	$2,044,897	$38,965,404
2025	5,911,575	$40,630,961	$1,900,992	$42,531,953
2026	5,937,596	$40,809,809	$1,707,310	$42,517,119
2027	5,962,470	$43,041,257	$1,499,248	$44,540,505
2028	5,985,623	$45,368,810	$1,388,887	$46,757,697
2029	6,008,776	$47,805,365	$1,318,936	$49,124,301
2030	6,032,011	$50,398,995	$1,238,308	$51,637,303
2031	6,055,246	$53,104,184	$1,255,819	$54,360,003
2032	6,078,562	$55,969,437	$1,311,767	$57,281,204
2033	6,101,879	$58,995,680	$1,391,996	$60,387,676

Source: LUS and Burns & McDonnell projections
(1) Retail sales are based on projected customer growth and use per customer.
(2) Revenue projections include adopted 9.5% rate increases in 2023, 2024, and 2025.
(3) Revenue projections include planned 5% rate increases from 2027 to 2033.
(4) Other revenue includes miscellaneous operation revenue and interest income.

Table 10-16: Wastewater System Historical and Projected Operating Expenses

FY	Treatment	Collection	Customer Accounting, Collecting, Service and Info	Administrative & General	Total Operating Expenses
2019	$6,987,121	$5,312,751	$1,365,016	$5,546,626	$19,211,514
2020	$6,253,827	$4,888,522	$1,318,028	$5,834,810	$18,295,187
2021	$6,707,776	$5,497,827	$1,655,511	$5,930,475	$19,791,589
2022	$6,929,937	$5,229,473	$2,181,031	$6,265,821	$20,606,263
2023	$7,706,584	$4,550,313	$2,031,487	$6,635,737	$20,924,121
2024	$7,555,425	$5,317,631	$2,064,779	$6,798,620	$21,736,455
2025	$7,772,027	$5,471,189	$2,125,572	$6,975,384	$22,344,172
2026	$7,970,820	$5,613,750	$1,927,756	$7,156,744	$22,669,069
2027	$8,186,536	$5,768,269	$1,980,290	$7,342,820	$23,277,915
2028	$8,439,841	$5,950,539	$2,042,406	$7,533,733	$23,966,518
2029	$8,643,013	$6,097,051	$2,092,911	$7,729,610	$24,562,586
2030	$8,857,475	$6,251,724	$2,146,314	$7,930,580	$25,186,093
2031	$9,081,474	$6,413,323	$2,202,144	$8,136,775	$25,833,717
2032	$9,306,903	$6,575,814	$2,258,381	$8,348,331	$26,489,428
2033	$9,518,950	$6,728,177	$2,311,414	$8,565,388	$27,123,929

Source: LUS and Burns & McDonnell projections
(1) Total Operating Expenses do not include ILOT, debt service, capital, or other expenses

Table 10-17: Water System Historical and Projected Retail and Wholesale Sales and Revenue

FY	Retail Sales (1000 gallons)	Wholesale Sales (1000 gallons)	Retail Sales Revenue	Wholesale Sales Revenue
2019	5,148,605	2,171,928	$14,425,369	$5,762,507
2020	5,075,882	2,191,571	$14,544,345	$6,355,680
2021	5,063,766	2,322,023	$14,358,667	$6,956,818
2022	5,190,827	2,424,469	$14,888,377	$7,359,956
2023	5,411,907	2,561,153	$16,787,559	$7,924,605
2024	5,572,583	2,631,888	$17,943,718	$8,821,977
2025	5,598,156	2,702,521	$19,481,584	$9,880,614
2026	5,622,798	2,773,019	$19,567,337	$10,957,488
2027	5,646,353	2,842,552	$20,609,189	$11,360,379
2028	5,668,279	2,903,154	$21,709,507	$12,378,403
2029	5,690,204	2,965,766	$22,874,620	$12,792,588
2030	5,712,207	3,030,470	$24,105,513	$13,945,496
2031	5,734,210	3,097,349	$25,402,550	$14,418,950
2032	5,756,291	3,166,491	$26,766,751	$15,725,958
2033	5,778,371	3,237,990	$28,198,451	$16,267,720

Source: LUS and Burns & McDonnell projections
(1) Retail sales are based on projected customer growth and use per customer. Wholesale sales are based on customer specific forecasts.
(2) Retail revenue projections include adopted 8.0% rate increases in 2023, 2024, and 2025.
(3) Retail revenue projections include planned 5% rate increases from 2027 to 2033.
(4) Projected wholesale rate revenue increases include 10% in 2024, 9% in 2025, 8% in 2026, and 8% every other year beginning in 2028.
(5) Other revenue includes miscellaneous operation revenue and interest income.

Table 10-18: Water System Historical and Projected Operating Expenses

FY	Production	Distribution	Customer Accounting, Collecting, Service and Info	Administrative & General	Total Operating Expenses
2019	$5,496,311	$2,889,727	$1,172,251	$4,668,916	$14,227,206
2020	$5,008,674	$2,098,086	$1,295,339	$4,757,007	$13,159,106
2021	$5,246,546	$2,174,002	$1,446,359	$4,967,083	$13,833,990
2022	$5,862,431	$2,053,244	$1,736,861	$5,347,900	$15,000,437
2023	$6,891,472	$2,600,014	$1,754,984	$5,824,942	$17,071,411
2024	$7,054,654	$2,867,614	$1,786,413	$5,965,673	$17,674,354
2025	$7,297,549	$2,942,172	$1,838,030	$6,120,781	$18,198,531
2026	$7,533,993	$3,018,669	$1,883,577	$6,279,921	$18,716,160
2027	$7,783,701	$3,097,154	$1,934,305	$6,443,199	$19,258,359
2028	$8,054,193	$3,177,680	$1,992,326	$6,610,722	$19,834,921
2029	$8,300,579	$3,260,300	$2,042,238	$6,782,601	$20,385,718
2030	$8,559,334	$3,345,067	$2,094,600	$6,958,948	$20,957,950
2031	$8,829,725	$3,432,039	$2,149,078	$7,139,881	$21,550,723
2032	$9,107,219	$3,521,272	$2,204,213	$7,325,518	$22,158,223
2033	$9,383,022	$3,612,825	$2,257,389	$7,515,982	$22,769,218

Source: LUS and Burns & McDonnell projections
(1) Total Operating Expenses do not include ILOT, debt service, capital, or other expenses.

11.0 CONTINUING DISCLOSURES – COMMUNICATIONS SYSTEM

11.1 Introduction

Government entities that issue bonds must enter into a continuing disclosure agreement to be in compliance with the SEC Rule 15c2-12. As part of the continuing disclosure agreement, the issuer promises to provide certain annual financial information and material event notices to the public. These filings must be made electronically at the EMMA portal (www.emma.msrb.org). LPPA had the following outstanding debt as of October 31, 2023:

- Communications System Revenue Refunding Bonds, Series 2015
- Communications System Revenue Refunding Bonds, Series 2021

The continuing disclosure agreements for the outstanding bonds require that specific tables contained in the Official Statements must be updated annually. This section contains these required tables. This section contains forward-looking financial statements based on Burns & McDonnell's current expectations and projections about future events and financial trends regarding the Communications System. Projections as contained herein reflect estimates of what might occur in the future based on the information available to us as of the date of this Report. Burns & McDonnell cannot predict the future or guarantee future financial performance of the Communications System. To the extent that assumptions used in these projections vary from those observed, financial performance as presented herein will vary from actual performance. Burns & McDonnell relied upon a 10-year projection prepared by the Communications System for the Projected Period of November 1, 2023, through October 31, 2033. LUS Fiber provided actual historical data for the 2019 through 2023 period.

11.2 Information and Assumptions Relied Upon

The projected operating results for the Communications System rely upon the information and assumptions gathered during the Burns & McDonnell project team review and summarized below.

1. Burns & McDonnell assumed the Communications System will operate, maintain, and upgrade head-end facilities and other important supporting infrastructure to ensure reliable and technologically competitive service offerings to customers.
2. Burns & McDonnell assumed the Communications System will hire and maintain competent personnel. If needed, the Communications System will provide training to personnel to ensure the safety and reliability of the Communications System.

3. Burns & McDonnell assumed the Communications System will maintain and renew any required permits or approvals.
4. Burns & McDonnell assumed standard operating procedure for the Communications System and Burns & McDonnell did not include the effects of any event outside of the Communications System's control, including force majeure.
5. Communications System financial and operating information was provided by the Communications System, LCG, interviews with LUS and LCG staff, and visual observations of the Communications System facilities. Data provided by the Communications System and LCG include historical financial and operating data for 2019–2023, projected financial and operating data for years 2024–2033, and the 2024 Budget.
6. The most recent semiannual Blue Chip Economic Indicator projection of GDP was used for long term inflation for FY 2024 to FY 2033. The GDP inflation factor was used to escalate O&M expenses and capital similar to previous years.

11.3 Projected Operating Results Assumptions

11.3.1 Revenue Projections

Since the Communications System inception in 2009, the system has successfully added customers and increased market share within the LUS service territory. The sale of CATV, Internet, and telephone services to retail and wholesale customers directly relates to the Communications System revenues. Projected operating results reflect average annual customer growth of [redacted] percent over the 2024 through 2033 period. The growth assumption results in target market share from the current [redacted] percent to [redacted] percent in 2033. Revenue per customer reflects a blend of CATV, Internet, and telephone services as described earlier in this Report. Retail service pricing levels are projected to be adjusted periodically in consideration of the cost of goods sold and other rising costs. The Communications System pricing practices reflect an opportunistic approach where the development of new or higher value service offerings and competitor price increases provide the Communications System the ability to adjust rates if warranted. The Communications System's pricing strategy is to offer comparable or higher quality services at a lower price than the competition. Additionally, wholesale customer projections remain constant, at [redacted] customers, from 2024 to 2033 with revenues of [redacted] to [redacted] million annually. The revenue projections included in the forecast include estimated incremental revenues and customers resulting from grant funded projects described in Section 7.6.1 that are currently underway. Revenue and customer projections were provided by LUS Fiber.

11.3.2 Expense Projections

The expense projection includes the cost of goods sold, maintenance of plant, A&G expense, and other miscellaneous expenses. The projected cost of goods sold assumes the 2023 cost per customer (adjusted for historical cost of goods sold inflation) multiplied by the projected number of CATV customers. Other expenses have been escalated based on expectations for inflation and customer expansion over the period 2024 through 2033. The expense projections included in the forecast include the estimated incremental operating expenses associated with supporting increased customer growth resulting from the grant funded projects. Incremental expense projections associated with the grant funded expansion projects were provided by LUS Fiber.

11.3.3 Debt Service

The projected net revenues for debt service exceed the required debt service coverage ratio of 1.0.

11.3.4 Credit Event

If a Credit Event were to occur, bond covenants require that the Utilities System meet the credit obligation of the Communications System with funds available in the Utilities System Capital Additions Fund. The Utilities System has a debt service coverage ratio requirement of 1.0.

11.3.5 Other Expenses

Other expense items include the Communications System's Imputed Tax obligations, repayment of inter-utility loans from the Utilities System, Operating Account reserve obligations, and other miscellaneous expenses. The Communications System utilized loans from LUS to fund the fiber system assets purchase, startup costs, and operating costs. The Communications System loans repayment will continue through 2033. The Operating Account reserve obligation was a one-time expense incurred by the Communications System to establish a Communications Systems Operating Account.

11.3.6 Imputed Tax

Pursuant to terms of a regulatory settlement, the Communications System must pay an Imputed Tax. The Imputed Tax is equivalent to paying state and local sales tax, property tax, franchise tax, and income tax. The Communications System's ILOT calculation provides for an ILOT payment up to 12 percent of Adjusted Revenues deposits (revenues less cost of goods sold). However, all or a portion of this payment is made subject to an ILOT test. The ILOT test ensures that the Communications System retains sufficient cash to meet capital obligations. The ILOT test requires that the ILOT payment be no greater than 12 percent of Adjusted Revenues deposits, or the cash balance available after the payment of operating expenses and debt service less 7.5 percent of the Adjusted Revenues deposits. The Communications

System tax requirement cannot be less than that required by the Imputed Tax calculation. In 2015, the City-Parish Council approved an ordinance that revises the required ILOT payment. This ordinance recognizes that the Communications System operates in a competitive environment and the ILOT calculation was a greater expense than Imputed Tax. With the approval of this ordinance, the Communications System paid an ILOT amount equal to Imputed Taxes. The Imputed Tax payments were made to LUS and the City through 2020 as prescribed in the ordinance. Starting in 2020, 100 percent of the Imputed Tax payments started going to the City. For FY 2023, LUS Fiber and LCG agreed to the full ILOT payment equal to 12 percent of adjusted revenues. At the time of this report LUS Fiber is working collaboratively with LCG to finalize the ILOT payment to the City for FY 2024. The audited information for FY 2023 includes the ILOT payment to the City. For the purposes of the Continuing Disclosures, LUS Fiber has directed Burns & McDonnell to include future ILOT payments equaling 12 percent of adjusted revenues in its projections until a final resolution is reached for FY 2024 and forward.

11.3.7 Capital Improvement Program

The CIP includes the ongoing cost of customer installations, head-end, hut, network equipment and upgrades, and other miscellaneous items. In this Report, the capital plan for the years 2024 through 2028 is based on an adjusted 2024 Budget provided to Burns & McDonnell in March 2024 while 2028 through 2033 is based on historical spending. The CIP included in the forecast also includes grant funded projects described in Section 7.6.1 totaling approximately $44 million. The federal grants, state grants, and surrounding parish contributions are also included in the forecast.

11.3.8 Cash Available

Cash available reflects the remaining funds available to the Communications System once all other credit obligations of the Communications System are satisfied. For the Communications System, LUS established a financial objective that requires a minimum cash balance of $2,250,000 to be held in an Operating Account. The Operating Account maintains a cash reserve to meet system O&M expense requirements. Once O&M expense and debt service obligations are met by the Communications System, accumulated cash balances are held in a Capital Additions Fund and are applicable to capital projects or other lawful uses. The Projected Period assumes that there are sufficient cash balances in the Capital Additions Fund to meet the entire Communications System CIP obligation.

11.3.9 Cross Reference

The following table is provided to assist in cross referencing the information contained in the Continuing Disclosures with the information contained in this Report.

Table 11-1: Communication System Revenue Refunding Bonds, Series 2015

Official Statement	Official Statement Page	Official Statement Table	Report Reference
Communications System, Pages 28-41	33	Historical and Projected Number of Customers for the Communications	Table 11-3
	34	Projected Retail Market Share	Table 11-3
	35	Operating Revenue Summary	Table 7-7
	36	Communications System Revenue Forecast	Table 11-4
	37	Communications System Historical Operations Expense	Table 7-12
	37	Communications System Projected Operations Expense	Table 11-5
	38	Competitive Internet Service Offerings	Table 7-2
	40	Communications System Capital Improvement Plan	Table 7-3
	40	Communications System Projected Capital Improvement Plan	Table 7-3
Operating Revenues and Expenses, Page 42-45	42	Communications System Historical Operating Results	Table 7-10, Table 7-8
	44	Communications System Projected Operating Results	Table 11-6
	45	Communications System Sources & Uses of Funds	Table 11-7
Debt Service Coverage Calculation, Page 45-47	47	Communications System Projected Debt Service Coverage Ratios	Table 11-6
The Utilities System, pages 47-77	58	Historical and Projected Electric Retail and Wholesale Sales	Table 4-1, Table 10-13
	58	Electric System Customer Class Statistics	Table 4-2, Table 4-28
	59	Electric System Capital Improvement Plan (Five Year Plan)	Table 3-5
	60	Electric System Projected Sales and Revenue Forecast	Table 10-13
	61	Electric System Projected Operating Expense	Table 10-14
	62	Historical and Projected Water Retail and Wholesale Sales	Table 5-1, Table 10-17
	62	Water System Largest Retail Customers	Table 10-10
	65	Water System Capital Improvement Plan (Five Year Plan)	Table 3-5
	66	Water System Projected Sales and Revenue Forecast	Table 10-17
	66	Water System Projected Operating Expenses	Table 10-18
	67	Historical Wastewater System Flows (000 Gallons)	Table 6-1
	68	Wastewater System Largest Retail Customers	Table 10-11
	69	Proposed Wastewater System Capital Improvement Plan (Five Year Plan)	Table 3-5
	71	Wastewater System Projected Sales and Revenue	Table 10-15
	71	Wastewater System Projected Operating Expenses	Table 10-16
	72	Historical and Projected Number of Customers by System	Table 11-9
	73	Electric Residential Rate Comparison	Table 4-22
	74	Electric Commercial Rate Comparison	Table 4-23
	75	Utilities System Historical Operating Results	Table 11-9
	76	Utilities System Historical Debt Service Coverage Calculation	Table 3-3
	76	Utilities System Projected Debt Service Coverage Calculation	Table 11-10
	77	Utilities System Residual Revenue Debt Service Coverage - Communications System Default	Table 11-11
Appendix B-Financial & Statistical Data	B-1 to B-11	Financial and Statistical Data for Lafayette, LA	See Section 12

Table 11-2: Communication System Revenue Refunding Bonds, Series 2021

Official Statement	Official Statement Page	Official Statement Table	Report Reference
The Communications System, pages 24-34	26	Historical and Projected Number of Customers for the Communications	Table 11-3
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	28	Operating Revenue Summary	Table 7-7
	29	Communications System Revenue Forecast	Table 11-4
	29	Communications System Historical Operating Expenses	Table 7-12
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Operating Revenues and Expenses, pages 35-37	34	Communications System Historical Operating Results	Table 7-8
	36	Communications System Projected Operating Results	Table 11-6
	37	Communications System Sources & Uses of Funds	Table 11-7
Debt Service Coverage Calculation, pages 37-38	38	Communications System Debt Service Coverage	Table 11-6
The Utilities System, pages 38-60	50	Historical Electric Retail and Wholesale Sales	Table 4-1
	50	Electric System Largest Retail Customers	Table 10-9
	51	Electric System Rates Summary	Table 4-26
	51	Electric System Customer Class Statistics	Table 4-28
	52	Electric Residential Rate Comparison	Table 4-22
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	57	Wastewater System Largest Retail Customers	Table 10-11
	58	Historical Wastewater System Flows (000 Gallons)	Table 6-1, Table 10-15
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	63	Water System Largest Retail Customers	Table 10-10
	63	Historical Water Retail and Wholesale Sales	Table 5-1
	64	Water Retail Rate Summary	Table 5-24
	65	Utilities System Income Statement	Table 11-9
	66	Utilities System Historical Debt Service Coverage Calculation	Table 11-10

Table 11-3: Communications System Number of Customers and Market Penetration

Year	Number of Customer Accounts	Increase in Customer Accounts (%)	LUS Target Market	Increase in LUS Target Market (%)	LUS Target Market Share
2019	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2020	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2021	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2022	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2023	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2024	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2025	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2026	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2027	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2028	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2029	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2030	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2031	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2032	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2033	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Average Growth	[redacted]		[redacted]		

Source: LUS Fiber

(1) Communications customer projections include retail customers with CATV, Internet, and telephone or some combination of the three services. The number of customers reflects the customers at the end of the year. The retail customer projection takes into consideration that the Communications System began serving customers in 2007 as a new market entrant. Historical percentage growth in customers has been significant because the Communications System was new to the market. The projection assumes that percentage increases in annual growth will gradually decline as LUS market presence matures and market penetration reflects levels that consider the presence of several competitors.

(2) Projection includes all LUS residential electric customers inside the City limits, as well as other locations passed by LUS Fiber's fiber network.

(3) Target market excludes apartments and other multifamily dwellings.

(4) The target market and projected number of LUS Fiber customers is projected to increase with the expansion of the system into new Parishes in FY 2025 and FY 2025. The federal grants, state grant, and other parish funds are supporting this expansion.

Table 11-4: Communications System Revenue Forecast

Year	Number of Retail Customers	Number of Wholesale Customers	Retail	Wholesale	Total
2024	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2025	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2026	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2027	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2028	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2029	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2030	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2031	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2032	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2033	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Average Growth	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Source: LUS Fiber

Table 11-5: Communications System Operation and Maintenance Expense

Year	Cost of Goods Sold	Other Expenses	Total Expenses
2024	[redacted]	[redacted]	[redacted]
2025	[redacted]	[redacted]	[redacted]
2026	[redacted]	[redacted]	[redacted]
2027	[redacted]	[redacted]	[redacted]
2028	[redacted]	[redacted]	[redacted]
2029	[redacted]	[redacted]	[redacted]
2030	[redacted]	[redacted]	[redacted]
2031	[redacted]	[redacted]	[redacted]
2032	[redacted]	[redacted]	[redacted]
2033	[redacted]	[redacted]	[redacted]
Average Growth	[redacted]	[redacted]	[redacted]

Source: LUS Fiber

(1) Cost of Goods Sold predominantly consists of programming and content costs associated with service offerings.

(2) Includes O&M expenses; other expenses include customer service, and A&G costs. Excludes depreciation. Operating expenses do not include imputed tax, inter-utility loan payments to LUS, external loan payments, and other miscellaneous expenses.

Table 11-6: Communications System Projected Operating Results

	2024	2025	2026	2027	2028
Operating Revenues					
Retail Sales	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Wholesale Sales	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Other Revenues	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Operating Revenues	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Operating Expenses					
Cost of Goods Sold	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
O&M and Other	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Operating Expenses	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Balance Available for Debt Service	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Debt Service	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Debt Service Coverage Ratio	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Balance After Debt Service	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Other Income (Expenditures)					
Imputed Tax and ILOT	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Inter-utility Loan Repayment	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Other Income	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Other Income (Expenditures)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Balance Available for Capital	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Source: LUS Fiber

Table 11-7: Communications System Sources and Uses of Funds

Construction Fund	2024	2025	2026	2027	2028
Sources of Funds					
Beginning Balance	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Deposits	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Interest Income	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Uses of Funds					
Capital Expenditures	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Construction Fund Ending Balance	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Cash Available and Capital Additions Fund					
Sources of Funds					
Beginning Balance	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Deposits from Earnings	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Other	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Uses of Funds					
Capital Expenditures	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Operating Account Creation	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Sinking Fund transfer to Refunding	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Retained Earnings Ending Balance	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Source: LUS Fiber

Table 11-8: Utilities System Historical and Projected Number of Customers by System

Year	Electric	Water	Wastewater
Historical			
2019	68,495	58,316	45,623
2020	69,364	57,412	46,133
2021	70,096	57,891	46,681
2022	70,865	58,302	46,792
2023	71,521	59,076	47,446
Projected			
2024	71,801	59,651	47,896
2025	72,130	59,985	48,116
2026	72,448	60,311	48,328
2027	72,751	60,626	48,530
2028	73,034	60,925	48,719
2029	73,316	61,218	48,907
2030	73,600	61,518	49,096
2031	73,883	61,818	49,285
2032	74,168	62,120	49,475
2033	74,452	62,421	49,665
Average Growth	0.4%	0.5%	0.4%

Source: LUS

(1) Electric System projections based on the Load Forecast for LUS developed by Burns & McDonnell.

(2) Water System retail customer projections were based on the Electric System customer growth forecast. Wholesale customer growth was based on specific growth forecasts for wholesale customers.

(3) Wastewater System customer projections were based on the Electric System customer growth forecast.

Table 11-9: Historical Operating Results

Operating Revenues	2019	2020	2021	2022	2023
Electric System					
Base Rate - Electric	$100,836,993	$97,878,860	$99,763,119	$100,740,765	$104,240,922
Fuel Charge - Electric	73,101,002	65,117,850	76,344,759	121,702,909	90,956,868
Wholesale Sales	179,515	157,404	159,823	167,965	159,543
Other Revenues (1)	5,848,375	3,313,405	3,584,203	3,852,563	6,466,214
Water					
Retail Sales	14,425,369	14,544,345	14,358,667	14,888,377	16,787,559
Wholesale Sales	5,762,507	6,355,680	6,956,818	7,359,956	7,924,605
Other Revenues (1)	1,181,598	796,531	588,817	716,574	1,668,658
Wastewater					
Retail Sales	29,910,672	29,861,226	30,119,770	31,031,170	34,357,687
Other Revenues (1)	2,128,101	1,261,483	1,648,552	1,217,374	2,477,231
Fiber	0	0	0	0	0
Total Operating Revenues (2)	$233,374,132	$219,286,785	$233,524,527	$281,677,651	$265,039,287
Operating Expenses					
Electric System					
Generation	$5,097,410	$3,606,585	$4,997,512	$4,439,140	$5,202,959
Fuel - Gas Generation	2,369,957	1,945,110	6,515,336	14,763,071	5,249,553
Purchased Power LPPA	47,202,751	37,491,409	50,049,857	57,135,203	53,935,067
Purchased Power Other	29,702,897	34,610,823	33,691,123	60,115,312	41,406,222
Other	35,027,667	34,390,320	33,832,947	31,550,983	30,657,873
Water	14,227,206	13,159,106	13,833,990	15,000,437	17,071,411
Wastewater	19,211,514	18,295,187	19,791,589	20,606,263	20,924,121
Fiber	0	0	0	0	0
Total Operating Expenses (2)	$152,839,402	$143,498,541	$162,712,354	$203,610,408	$174,447,206
Balance Available for Debt Service	$80,534,731	$75,788,244	$70,812,174	$78,067,243	$90,592,081
Debt Service	$22,732,925	$25,374,000	$25,095,600	$23,741,091	$23,650,100
Debt Service Coverage Ratio (2)	3.5	3.0	2.8	3.3	3.8
Balance After Debt Service	$57,801,806	$50,414,244	$45,716,574	$54,326,152	$66,941,981
Other Income					
Interest Income					
Water Tapping Fees	$56,760	$61,540	$71,460	$63,520	$88,680
Communications Lease Income	0	11,379	0	7,906	3,953
Contributions in Aid of Construction	0	140,856	0	150,700	30,188
Misc. Non Operating Revenue	3,141,166	3,633,306	2,412,390	4,330,861	5,728,197
Total Other Income	$3,197,926	$3,847,081	$2,483,850	$4,552,987	$5,851,017
Other Expenses					
Interest on Customer Deposits	$5,331	$1,834	$1,897	$1,927	$978
Tax Collections/Non Operating	0	0	0	0	0
Misc Non Operating Expense	3,369,807	3,649,380	1,576,322	2,408,295	690,830
	$3,375,138	$3,651,214	$1,578,218	$2,410,222	$691,808
Payment in Lieu of Tax	$25,051,002	$24,679,711	$24,056,012	$24,185,667	$25,432,565
Available for Bond Reserve & Capital Additions	$32,573,592	$25,930,400	$22,566,193	$32,283,249	$46,668,625

Source: LUS

(1) Other Revenue includes Miscellaneous Operating Revenues and Interest Income.

(2) Debt Service was prepared on a cash basis. Debt Service includes the Series 2010 Bonds, Series 2012 Bonds, Series 2019 Bonds, and Series 2021 Bonds. The Series 2010 Bonds were fully redeemed in 2020 by the proceeds of the Series 2017 Bonds. The Series 2012 Bonds were refunded with the Series 2021 Bonds on November 1, 2021.

(3) The Operating Revenues, Expenses, and Debt Service Coverage may differ slightly from LCG's Annual Comprehensive Financial Report.

(4) Interest Income is included above with Operating Revenues.

Table 11-10: Utilities System Revenues and Debt Service Coverage Ratios

FY	Operating Revenues	Operating Expenses	Net Available Revenues for Debt Service	Debt Service	Balance Available After Debt Service	Debt Service Coverage Ratio
2024	$263,895,322	$174,177,927	$89,717,395	$27,193,775	$62,523,620	3.3
2025	$279,709,553	$177,813,196	$101,896,356	$36,563,994	$65,332,363	2.8
2026	$284,233,203	$177,196,604	$107,036,598	$36,548,944	$70,487,654	2.9
2027	$294,513,665	$181,322,331	$113,191,333	$49,470,544	$63,720,790	2.3
2028	$315,218,403	$198,021,628	$117,196,775	$48,274,944	$68,921,831	2.4
2029	$319,677,823	$189,191,905	$130,485,918	$44,196,644	$86,289,275	3.0
2030	$326,798,223	$193,195,775	$133,602,448	$44,218,760	$89,383,688	3.0
2031	$335,663,707	$198,859,676	$136,804,031	$44,222,341	$92,581,690	3.1
2032	$344,353,916	$203,109,281	$141,244,635	$44,224,414	$97,020,222	3.2
2033	$346,881,783	$199,143,703	$147,738,079	$44,222,134	$103,515,945	3.3

Source: LUS

(1) Operating Revenues include interest income and other miscellaneous revenue.

(2) Operating Expenses include O&M and other expenses such as customer service, and A&G costs. Operating Expenses do not include ILOT, normal capital and special equipment, nor other miscellaneous expenses.

(3) LUS Debt Service was prepared on a cash basis. Debt Service includes the Series 2017 Bonds, Series 2019 Bonds, Series 2021 Bonds, Series 2023 Bonds, and projected new bond issues in 2025, 2027, and 2029.

Table 11-11: Utilities System Revenues and Debt Service Coverage Ratios
Assuming a Communications System Default

FY	Utilities System Net Available Revenues for Debt Service	Utilities System Debt Service	Capital Additions Account, Minimum Capital Requirement	Net Revenues Available for Communications Debt Service	Communications Debt Service	Balance Available After Debt Service	Debt Service Coverage Ratio from Residual Revenues
2024	$88,882,593	$27,193,775	$13,499,137	$48,189,681	$10,198,965	$37,990,716	4.7
2025	$101,093,393	$36,563,994	$14,242,999	$50,286,400	$10,477,565	$39,808,835	4.8
2026	$106,285,882	$36,548,944	$14,713,020	$55,023,918	$10,526,865	$44,497,053	5.2
2027	$112,494,955	$49,470,544	$15,362,046	$47,662,365	$10,527,565	$37,134,800	4.5
2028	$116,556,907	$48,274,944	$16,046,544	$52,235,420	$10,531,028	$41,704,392	5.0
2029	$129,904,822	$44,196,644	$16,377,225	$69,330,953	$10,533,953	$58,797,000	6.6
2030	$133,082,474	$44,218,760	$16,762,706	$72,101,007	$10,538,448	$61,562,560	6.8
2031	$136,347,623	$44,222,341	$17,195,143	$74,930,139	$10,531,858	$64,398,281	7.1
2032	$140,854,338	$44,224,414	$17,699,769	$78,930,154	$0	$78,930,154	NA
2033	$147,416,536	$44,222,134	$18,188,689	$85,005,713	$0	$85,005,713	NA

Source: LUS

(1) LUS Debt Service was prepared on a cash basis. Debt Service includes the Series 2017 Bonds, Series 2019 Bonds, Series 2021 Bonds, Series 2023 Bonds, and projected bond issues in 2025, 2027, and 2029.

(2) The Bond Ordinances require a minimum amount equal to 7.5 % of the total Non-fuel Revenue deposits into the Receipts Account for the purposes of paying capital costs.

(3) Communications Debt Service was prepared on a cash basis. Debt Service includes the Series 2015 Bonds and Series 2021 Bonds. No future debt issues are projected to be issued for the Communications System from 2024 through 2033.

12.0 CONTINUING DISCLOSURES– FINANCIAL AND STATISTICAL DATA

12.1 Introduction

This section includes financial and statistical data. LUS provided this data to Burns & McDonnell for inclusion in this continuing disclosure.

LAFAYETTE CONSOLIDATED GOVERNMENT
REVENUE BONDS CONTINUING DISCLOSURE

Population of City of Lafayette

Year	Population
1990	94,421
2000	110,257
2007	112,199
2008	111,088
2009	112,640
2010	120,623
2013	122,510
2014	126,066
2015	127,661
2016	127,626
2017	131,191
2018	132,747
2019	134,286
2020	132,333
2021	131,034
2022	122,177
2023	123,274

Sources: Lafayette Economic Development Authority and U.S Census Bureau

Assessed Value of Taxable Property of the City

(All dollars in thousands)

Fiscal Year	Assessed Value	Fiscal Year	Assessed Value
2004	716,544	2014	1,381,041
2005	785,937	2015	1,461,552
2006	826,075	2016	1,577,908
2007	864,797	2017	1,592,059
2008	905,005	2018	1,586,428
2009	1,129,670	2019	1,615,615
2010	1,167,335	2020	1,546,875
2011	1,178,154	2021	1,548,590
2012	1,220,334	2022	1,668,799
2013	1,306,098	2023	1,763,121

Source: Lafayette Parish Assessor's Office

Classification of Property		2023 Assessed Valuation (City of Lafayette)
	Real Estate	$1,366,682,397
	Personal Property	367,346,377
	Public Service Property	26,975,057
	Total	$1,761,003,831

Source: Lafayette Parish Assessor's Office

Millage Rates

	2019	2020	2021	2022	2023
Parishwide Taxes:					
Schools	4.59	4.92	4.92	4.92	4.92
School District No. 1 -					
Special	7.27	7.79	7.79	7.79	7.79
Special School Improvements	5.00	5.35	5.35	5.00	5.00
School 1985 Operation	16.70	17.88	17.88	17.88	17.88
Courthouse & Jail Maintenance	2.34	2.51	2.51	2.51	2.51
Library (2007-2016)	N/A	N/A	N/A	N/A	N/A
Library (2009-2018)	N/A	N/A	N/A	N/A	N/A
Library (2003-2012)	N/A	N/A	N/A	N/A	N/A
Library (2017-2026)	2.91	2.91	2.91	2.91	2.91
Library (2023-2032)	N/A	N/A	N/A	N/A	1.84
Health Unit Maintenance	N/A	N/A	N/A	N/A	N/A
Juvenile Detention Maintenance	1.17	1.25	1.25	1.25	1.25
Lafayette Economic Development Authority	1.68	1.68	1.8	1.8	1.8
Assessment District	1.44	1.67	1.67	1.67	1.67
Law Enforcement	16.79	17.36	17.36	17.36	17.36
Airport Maintenance	1.71	1.71	1.71	1.71	1.71
Minimum Security Maintenance	2.06	2.21	2.21	2.21	2.21
Bridges and Maintenance	4.17	4.47	4.47	4.47	4.47
Lafayette Parish Bayou Vermillion -					
Bond & Interest	0.17	0.1	0.1	0.1	0.1
Maintenance	0.75	0.79	0.79	0.79	0.79
Drainage Maintenance	3.34	3.58	3.58	3.58	3.58
Public Improvement Bonds	2.00	2.00	1.85	1.85	1.85
Teche-Vermillion Water District	1.41	1.41	1.41	1.41	1.5
Mosquito Abatement & Control	N/A	N/A	N/A	N/A	N/A
Health Unit, Mosquito, Ect.	3.56	3.64	3.64	3.64	3.64
Other Parish and Municipal Taxes:					
Parish Tax (Inside Municipalities)	1.52	1.63	1.63	1.63	1.63
Parish Tax (Outside Municipalities)	3.05	3.25	3.25	3.25	3.25
Lafayette Centre Development District	12.75	13.80	15.00	15.00	15.00
City of Lafayette	**17.94**	**17.94**	**18.19**	**18.19**	**18.19**

Sources: Lafayette Parish Assessor

LAFAYETTE CONSOLIDATED GOVERNMENT
REVENUE BONDS CONTINUING DISCLOSURE

Leading Taxpayers

The ten largest property taxpayers of the City and their 2023 assessed valuations follow:

First Horizon Bank

	Name of Taxpayer	Type of Business	2023 Assessed Valuation
1.	Stuller Inc	Manufacturing	$22,817,712
2.	First Horizon Bank	Banking	18,266,377
3.	Halliburton	Oil & Gas Support Services	12,839,979
4.	LHC Broup	General Medical & Surgical Hospitals	11,945,543
5.	Franks Casing	Oil & Gas Support Services	10,751,068
6.	J P Morgan Chase	Banking	10,363,018
7.	Whitney National Bank	Banking	10,327,158
8.	Wal Mart / Sams	Warehouse Clubs & Supercenters	8,731,074
9.	Entergy Gulf States	Electric Company	7,711,990
10.	M-O National Portfolio Holdings	Real Estate Investments	7,689,454
			$121,443,373 *

* Approximately 6.9% of the 2023 assessed valuation of the City.
Source: Lafayette Parish Tax Assessor

Sales Tax Collections

The City has collected the following amounts from its 1961 special one percent (1%) sales and use tax initially effective July 1, 1961 and 1985 special one percent sales and use tax initially effective July 1, 1985, each effective in perpetuity, for the periods indicated below:

City of Lafayette Combined (61 & 85) Gross Sales Tax Collections

Month Collected	FY 21-22 Actual Collections	FY 22-23 Actual Collections	FY 23-24 Actual Collections
November	8,296,683	8,489,340	8,317,615
December	8,283,462	8,286,595	8,460,563
January	9,736,053	10,158,482	10,076,447
February	7,835,396	7,882,570	7,898,786 *
March	7,431,751	7,861,884	
April	9,069,584	9,315,964	
May	8,778,239	8,686,320	
June	8,460,929	8,704,896	
July	8,965,695	9,114,363	
August	8,055,854	8,432,430	
September	8,288,960	8,688,479	
October	8,394,979	8,596,760	
TOTAL	$101,597,583	$104,218,082	$34,753,411

Source: City of Lafayette. Figures unaudited.
* Latest month for which figures are available

LAFAYETTE CONSOLIDATED GOVERNMENT
CASH AND INVESTMENTS
BALANCES AS OF OCTOBER, 2023

			CASH AND INVESTMENTS
	General Operating Funds:		
101	General Fund-City	$	52,115,916
102	Property Tax Escrow Fund		55,450
105	General Fund-Parish		7,390,321
126	Grants-Federal		1,382,446
127	Grants-State		(17,751,504)
128	Grants-Other		161,810
162	Community Development		(204,959)
163	Home Programs		140,165
165	Emergency Shelter Grant		0
166	HUD Home Loan Program		4,470
171	HUD Housing Loan Prog		438,308
185	FHWA I-49 Grant		0
187	FTA Capital		(684,429)
189	DOTD Travel Management		(77,883)
201	Recreation and Parks		0
203	Municipal Transit System		(1,449,679)
204	Heymann Performing Arts Center		0
206	Animal Control Shelter		1,553,657
207	Traffic Safety		13,915
209	Combined Golf Courses		385,051
210	Laf Develop & Revitaliz		0
232	City La DOTD Projects		2,858,557
233	Parish La DOTD Projects		11,216,486
241	Parish Parks & Rec		65,080
250	Opiod Settlement		1,402,319
252	State Seized/Forfeited Property		183,360
253	Fed Narc Seized /Forfeited Property		33,486
255	Criminal Non-support		(155,320)
259	Road & Bridge Maintenance		519,913
260	Road & Bridge Maintenance		10,252,490
261	Drainage Maintenance		6,506,857
262	Correctional Center		0
263	Library Fund		32,275,559
264	Courthouse Complex		14,531,835

LAFAYETTE CONSOLIDATED GOVERNMENT
CASH AND INVESTMENTS
BALANCES AS OF OCTOBER, 2023

		CASH AND INVESTMENTS
265	Juvenile Detention Facility	4,773,288
266	Public Health Unit	1,942,810
268	Criminal Court	0
269	Combined Public Health	1,733,007
271	Mosquito Abatement	937,679
272	Justice Department Federal Equitable Sharing Fund	64,584
273	Storm Water Management	5,952,088
274	Cultural Economy	551,161
275	Parishwide Street, Drainage, Bridge	2,086,784
276	Parishwide Parks & Rec Proj	599,399
278	Police & Fire Resiliency	9,445,211
279	Parishwide Fire Protection	258,794
296	Buchanan Parking Garage	0
297	Parking Program	0
299	Codes & Permits	303,532
550	Environmental Services	6,716,383
551	CNG Service Station	706,584
601	Payroll	4,081,485
605	Unemployment Compensation	2,385
607	Group Hospitalization	30,282,997
640	Hurricane Katrina	0
641	Hurricane Rita	0
643	Hurricane Gustav	0
644	Hurricane Isaac	0
645	2016 August Flood	0
646	Hurricane Barry	0
647	COVID19 Emer Preparedness	0
648	Hurricane Laura	(81,950)
649	Hurricane Delta	(575,205)
650	American Rescue Plan /21-City	32,045,409
651	American Rescue Plan /21-Parish	30,674,347
652	Hurricane Ida	(1,441)
702	Central Vehicle Maintenance	1,206,085
	Total General Operating Funds	$ **256,869,092**

LAFAYETTE CONSOLIDATED GOVERNMENT
CASH AND INVESTMENTS
BALANCES AS OF OCTOBER, 2023

			CASH AND INVESTMENTS
	Debt Service Funds:		
215	1961 City Sales Tax Trust Fund	$	32,406
222	1985 City Sales Tax Trust Fund		0
290	1986 City Sales Tax Trust Fund		676,863
291	1987 City Sales Tax Trust Fund		4,792,928
302	1988 City Sales Tax Trust Fund		6,865,195
303	1989 City Sales Tax Trust Fund		8,390,991
304	1990 City Sales Tax Trust Fund		2,990,053
305	1991 City Sales Tax Trust Fund		7,933,358
356	1992 City Sales Tax Trust Fund		3,836,488
357	1993 City Sales Tax Trust Fund		389,615
358	1994 City Sales Tax Trust Fund		542,739
801	1995 City Sales Tax Trust Fund		0
	Total Debt Service Funds	$	**36,450,635**
	Construction Funds:		
401	Sales Tax Capital Improvement Fund	$	89,594,198
438	2010 Sales Tax Bond Construction		0
441	City Combined Bond Fund		11,285,875
	Total Construction Funds	$	**100,880,073**
	Other:		
602	Firemen Pension & Relief	$	0
603	Police Pension & Relief		0
614	Risk Management		1,702,618
	Total Other	$	**1,702,618**

LAFAYETTE CONSOLIDATED GOVERNMENT
CASH AND INVESTMENTS
BALANCES AS OF OCTOBER, 2023

			CASH AND INVESTMENTS
	Utility System Funds:		
501	Receipts Fund	$	800,169
502	Operation and Maintenance		6,346,473
503	Bond & Interest		0
504	Capital Additions Fund		129,327,574
505	Security Deposit Fund		10,227,953
506	Bond Reserve Fund		14,735,061
507	2019 Cons Fund		8,632,698
	Total Utilities System Funds	$	**170,069,927**
	LPPA Funds:		
520	LPPA Revenue Fund	$	4,826,738
521	LPPA Operating Fund		9,780,909
522	LPPA Fuel Cost Stability Fund		4,519,122
523	LPPA Bond Reserve Fund		7,102,169
524	LPPA Reserve & Contingency Fund		5,305,542
525	LPPA Bond Interest & Principal Fund		0
	Total LPPA Funds	$	**31,534,480**
	Communications System Funds:		
531	Receipts Account	$	[redacted]
532	Operating Account		[redacted]
533	Debt Service Account		[redacted]
537	Capital Additions Account		[redacted]
538	Security Deposits Account		[redacted]
	Total Communications System Funds	$	[redacted]
	TOTAL ALL FUNDS	$	[redacted]

LAFAYETTE CONSOLIDATED GOVERNMENT
REVENUE BONDS CONTINUING DISCLOSURE
ECONOMIC INDICATORS

Per Capita Personal Income

	2018	2019	2020	2021	2022
Lafayette Parish	$ 48,707	$ 49,629	$ 52,507	$ 57,674	$ 58,963
Louisiana	46,207	47,460	50,874	54,217	54,501
United States	54,606	56,490	59,510	64,143	65,470

Source: U.S. Bureau of Economic Analysis

Effective Buying Income

	Median Household Effective Buying Income			
Year	Lafayette Parish	City of Lafayette	Louisiana	Nation
2022	$ 66,617	$ 55,850	$ 57,852	$ 75,149

Sources: U.S. Census Bureau

Employment

Year	Labor Force	Employment	Unemployment	Parish Rate	State Rate
2002	98,002	93,450	4,552	4.6	6.1
2003	97,675	92,904	4,771	4.9	6.4
2004	98,439	94,047	4,392	4.5	5.9
2005	104,121	98,670	5,451	5.2	7.1
2006	107,716	104,316	3,400	3.2	4.5
2007	110,161	106,874	3,287	3.0	4.3
2008	113,129	109,279	3,850	3.4	4.9
2009	111,996	106,294	5,702	5.1	6.8
2010	113,571	106,487	7,084	6.2	8.0
2011	113,869	107,117	6,752	5.9	7.8
2012	116,591	110,733	5,858	5.0	7.1
2013	118,870	113,007	5,863	4.9	6.7
2014	122,466	116,444	6,022	4.9	6.4
2015	120,075	113,260	6,815	5.7	6.3
2016	114,348	107,348	7,000	6.1	6.0
2017	113,028	107,513	5,515	4.9	5.1
2018	113,337	108,265	5,072	4.5	4.9
2019	113,607	108,685	4,922	4.3	4.8
2020	113,811	105,742	8,069	7.1	8.8
2021	115,123	109,956	5,167	4.5	5.6
2022	116,728	113,046	3,682	3.2	3.7

Source: Louisiana Workforce Commission

LAFAYETTE CONSOLIDATED GOVERNMENT
REVENUE BONDS CONTINUING DISCLOSURE

The final figures for the Parish for December 2023 were reported as follows:

Year	Labor Force	Employment	Unemployment	Parish Rate	State Rate
December 2023	116,728	113,046	3,682	3.2	*3.7

* The seasonally adjusted rate was 3.7

Source: Louisiana Workforce Commission

The final figures for the Lafayette Metropolitan Statistical Area ("MSA") for December 2023 were reported as follows:

Year	Labor Force	Employment	Unemployment	Parish Rate	State Rate
December 2023	212,362	204,662	7,700	3.6	*3.8

* The seasonally adjusted rate was 3.7

Source: Louisiana Workforce Commission

The following table show the composition of the employed work force in the Lafayette MSA.

Non-Farm Wage and Salary Employment by Major Industry
(Employees in Thousands)

	December 2019	December 2020	December 2021	December 2022	December 2023
Mining	12.8	9.9	9.9	10.1	10.7
Construction	9.4	9.0	10.7	10.6	11.4
Manufacturing	16.6	14.6	14.8	15.4	16.7
Trade, Transporation, & Utilities	42.7	43.7	41.6	41.6	42.1
Information	2.3	2.3	2.5	2.5	1.7
Financial Activities	10.9	10.0	10.7	10.8	11.5
Professional And Business Services	21	19.0	21.7	22.9	21.2
Educational and Health Services	33.1	31.3	33.2	34.6	36.8
Leisure and Hospitality	22.0	24.1	21.3	22.7	21.5
Other Services	7.2	6.7	6.8	7.0	7.2
Government	27.8	27.0	26.9	25.9	25.4
Total	205.8	197.6	200.1	204.1	206.2

Source: U.S. Bureau of Labor Statistics

LAFAYETTE CONSOLIDATED GOVERNMENT
REVENUE BONDS CONTINUING DISCLOSURE
ANNUAL AVERAGE LAFAYETTE PARISH CONCURRENT ECONOMIC INDICATORS 2019, 2020, 2021, 2022 AND THIRD QUARTER 2023
(All data not seasonally adjusted)

	2019	2020	2021	2022	2023:3
EMPLOYMENT					
Total	**131,140**	**124,940**	**130,702**	**135,248**	**134,677**
Agriculture,Forestry, Fishing, and Hunting	13,756	12,527	77	83	57
Mining	6,205	6,974	6,613	7,250	6,712
Utilities	87	69	434	421	434
Construction	1,948	1,594	6,495	6,905	6,683
Manufacturing	5,518	5,953	8,157	9,656	9,801
Wholesale Trade	8,365	8,299	5,629	5,857	5,838
Retail Trade	3,618	3,587	17,340	17,564	16,707
Transportation & Warehousing.	23,620	24,010	4,238	4,503	4,279
Information	2,220	1,926	2,067	1,535	1,533
Finance & Insurance	2,474	1,688	3,499	3,611	3,609
Real Estate and Rental and Leasing	8,672	7,353	2,783	3,157	3,218
Professional & Technical Services	8,592	6,332	8,593	8,936	9,181
Management of Companies and Enterprises	3,200	3,048	2,226	1,798	1,793
Administration and Waste Services	8,717	8,281	7,060	7,050	7,325
Educational Services	3,724	3,668	8,379	8,330	8,231
Health Care and Social Services	3,135	2,611	24,810	25,843	26,038
Arts, Entertainment, and Recreation	17,125	17,077	1,738	1,765	1,855
Accommodation and Food Services	3,982	4,049	13,847	14,097	14,376
Other Services, except Public Administration	420	447	3,202	3,425	3,496
Public Administration	5,761	5,446	3,513	3,459	3,510

	Annual	Annual	Annual	Annual	Quarterly
EARNINGS ($ in Thousands)					
Total	**$6,318,157**	**$1,698,686**	**1,868,992,648**	**1,946,111,938**	**1,854,738,019**
Agriculture,Forestry, Fishing, and Hunting	235,558	57,496	889,786	914,979	560,086
Mining	238,549	78,953	166,404,281	200,366,781	173,685,010
Utilities	3,353	809	8,419,172	8,629,917	7,330,062
Construction	33,910	8,011	107,616,205	120,027,117	108,295,625
Manufacturing	295,091	100,872	136,681,567	152,000,139	151,890,144
Wholesale Trade	365,194	95,891	100,941,198	107,935,943	102,449,314
Retail Trade	261,533	71,664	167,573,459	162,277,793	149,402,987
Transportation & Warehousing.	1,083,972	347,438	66,129,034	70,351,716	69,131,664
Information	119,024	29,737	34,116,100	24,456,164	23,286,735
Finance & Insurance	193,100	40,636	74,527,396	72,890,554	67,070,356
Real Estate and Rental and Leasing	530,626	114,554	49,236,259	58,777,725	57,548,844
Professional & Technical Services	782,913	146,036	182,768,668	195,959,486	167,813,968
Management of Companies and Enterprises	122,363	32,867	57,313,563	46,012,310	34,674,615
Administration and Waste Services	577,816	167,252	86,121,376	85,445,538	82,162,162
Educational Services	191,421	55,658	98,430,384	109,870,543	110,248,922
Health Care and Social Services	193,183	43,034	354,117,735	352,526,490	370,989,375
Arts, Entertainment, and Recreation	518,698	148,481	8,870,830	8,869,537	9,045,639
Accommodation and Food Services	194,059	59,300	78,497,909	75,323,694	77,758,154
Other Services, except Public Administration	27,456	9,103	36,875,683	39,049,744	40,375,680
Public Administration	350,298	90,869	53,462,043	54,425,768	50,982,677

Source:Louisiana Workforce and Louisiana Department of Labor

LAFAYETTE CONSOLIDATED GOVERNMENT
REVENUE BONDS CONTINUING DISCLOSURE

The names of the largest employers located in Lafayette Parish are as follows:

	Name of Employer	Type of Business	Approximate No. of Employees
1	Ochsner Lafayette General	Health Care	4,768
2	Lafayette Parish School System	Education	4,198
3	Our Lady of Lourdes Reg Med Ctr	Health Care	3,004
4	University of Louisiana-Lafayette	Education	2,516
5	Lafayette Consolidated Government	Public Administration	2,201
6	Stuller Inc.	Manufacturing	1,533
7	Amazon	Transportation	1,300
8	Wal-Mart Stores Inc.	Retail Trade	1,200
9	Lafayette Parish Government	Public Administration	824
10	LHC Group Inc.	Health Care	779

Source: Lafayette Economic Development Authority

Banking Facilities

The Lafayette Parish are is served by the following banks:

Banks	
First Horizon Bank	Gulf Coat Bank
3rd District Highway FCU	Hancock Whitney Bank
Acadian Federal Credit Union	Home Bancorp Inc
Acadiana Medical Federal Credit Union	Home Bank NA
Advancial	Home Bank
Advancial Federal Credit Union	IBERIA
American Bank & Trust Company	JD Bank
B1Bank	Louisiana National Bank
Bank of Sunset	Maple Federal Credit Union
Bank of Sunset & Trust Company	Meritus Credit Union
Bayou Federal Credit Union	PHI Federal Credit Union
Capital One	Rayne State Bank & Trust Co
Candence Bank	Regions Bank
Chase Bank	Section 705 Credit Union
Commercial Business Loans LLC	St. Jules Credit Union
Community First Bank	St. Landry Bank & Trust Company
CUSA Federal Credit Union	United Blood SVC of Lousiana
Farmers-Merchants Bank & Trust Company	University of LA Credit Union
Farmers State Bank & Trust Company	Washington State Bank
First National Bank of LA	Woodforest National Bank
First National Bank	

Source: Lafayette Economic Development Authority

STATEMENT OF BONDED DEBT
AS OF APRIL 2, 2024

Name of Issuer & Issue	Interest Rates (%)	Dated Date	Final Maturity Date	Principal Outstanding	Principal Amount Due Within One Year
Direct Debt of the City of Lafayette, State of Louisiana					
Certificates of Indebtedness, Series 2011	3.65	5/11/11	5/01/26	$ 1,525,000	$ 485,000
Utilities Revenue Refunding Bonds, Series 2017	4.0-5.0	10/13/17	11/01/35	50,705,000	3,215,000
Utilities Revenue Bonds, Series 2019	5.0	5/01/19	11/01/44	52,895,000	1,460,000
Taxable Utilities Revenue Refunding Bonds, Series 2021	2.0	11/18/21	11/01/28	64,885,000	12,725,000
Utilities Revenue Bonds, Series 2023	5.0-5.125	11/15/23	11/01/48	50,000,000	1,140,000
Public Improvement Sales Tax Refunding Bonds, Series ST-2011C	3.5-3.75	12/08/11	3/01/27	1,970,000	630,000
Public Improvement Sales Tax Refunding Bonds, Series ST-2012A	3.0-3.125	6/01/12	3/01/28	1,785,000	420,000
Public Improvement Sales Tax Bonds, Series 2013	3.125-5.0	6/21/13	3/01/38	10,555,000	580,000
Public Improvement Sales Tax Refunding Bonds, Series 2014A	5.0	10/17/14	3/01/30	8,385,000	1,230,000
Public Improvement Sales Tax Refunding Bonds, Series 2015A	2.43	12/18/15	3/01/25	590,000	590,000
Public Improvement Sales Tax Refunding Bonds, Series 2016D	3.0-4.0	2/26/16	3/01/32	7,775,000	825,000
Public Improvement Sales Tax Refunding Bonds, Series 2017A	5.0	7/27/17	3/01/32	7,225,000	1,250,000
Public Improvement Sales Tax Refunding Bonds, Series 2018A	4.0-5.0	12/06/18	3/01/33	14,045,000	1,395,000
Public Improvement Sales Tax Refunding Bonds, Series 2020	4.0	9/18/20	3/01/34	2,940,000	0
Taxable Public Improvement Sales Tax Refunding Bonds, Series 2020A	0.918-1.744	9/18/20	3/01/30	6,885,000	1,110,000
Public Improvement Sales Tax Bonds, Series 2020B	1.0-4.0	9/18/20	3/01/45	24,895,000	785,000
Public Improvement Sales Tax Refunding Bonds, Series ST-2011D	3.375-3.75	12/08/11	5/01/27	3,550,000	860,000
Public Improvement Sales Tax Refunding Bonds, Series ST-2012B	3.0-3.125	6/01/12	5/01/28	5,680,000	1,070,000
Public Improvement Sales Tax Refunding Bonds, Series 2014B	3.0-3.375	10/17/14	5/01/30	970,000	125,000
Public Improvement Sales Tax Refunding Bonds, Series 2015	5.0	2/06/15	5/01/24	830,000	830,000
Public Improvement Sales Tax Refunding Bonds, Series 2016A	3.0	2/26/16	5/01/25	835,000	410,000
Public Improvement Sales Tax Refunding Bonds, Series 2016E	2.63	2/26/16	5/01/32	1,130,000	110,000
Public Improvement Sales Tax Refunding Bonds, Series 2018B	4.0-5.0	12/06/18	5/01/34	14,585,000	1,055,000
Public Improvement Sales Tax Bonds, Series 2019A	2.5-5.0	4/11/19	5/01/44	25,705,000	130,000
Taxable Public Improvement Sales Tax Refunding Bonds, Series 2020C	0.768-1.744	9/18/20	5/01/30	5,485,000	760,000
Public Improvement Sales Tax Bonds, Series 2020D	1.0-5.0	9/18/20	5/01/45	24,990,000	535,000
Communications System Revenue Refunding Bonds, Series 2015	3.5-5.0	8/21/15	11/01/31	$ 56,515,000	$ 5,930,000
Communications System Revenue Refunding Bonds, Series 2021A (Tax-Exempt)	2.75-4.0	11/18/21	11/01/31	6,375,000	570,000
Taxable Communications System Revenue Refunding Bonds, Series 2021B (Federally Taxable)	2.0-2.3	11/18/21	11/01/31	6,440,000	605,000
Taxable Limited Tax Refunding Bonds, Series 2020	0.688-1.824	9/18/20	5/01/32	23,360,000	2,485,000

Debt of the Parish of Lafayette, State of Louisiana					
General Obligation Refunding Bonds, Series 2012	3.0-3.25	5/03/12	3/01/28	$5,630,000	$1,330,000
General Obligation Refunding Bonds, Series 2014	3.0-4.0	8/01/14	3/01/30	5,235,000	790,000
General Obligation Refunding Bonds, Series 2020	3.0-5.0	12/29/20	3/01/35	14,735,000	1,980,000
Debt of the Lafayette Public Power Authority					
Electric Revenue Refunding Bonds, Series 2015	3.0-5.0	11/13/15	11/01/32	23,695,000	970,000
Taxable Electric Revenue Refunding Bonds, Series 2021	2.0-2.45	11/18/21	11/01/32	34,840,000	3,575,000

SUMMARY DEBT STATEMENT AS OF April 2, 2024

A. **Debt of the City of Lafayette**

Type of Obligation	Principal Outstanding
Sales Tax Bonds	$170,810,000
Utilities Revenue Bonds	$218,485,000
Communications System Revenue Bonds	$69,330,000
Taxable Revenue Bonds	$23,360,000
Certificates of Indebtedness	$1,525,000

B. **Debt of the Parish of Lafayette**

Type of Obligation	Principal Outstanding
Unlimited Ad Valorem Tax Bonds	$25,600,000

E. **Debt of the Lafayette Public Power Authority**

Type of Obligation	Principal Outstanding
Electric Revenue Bonds	$58,535,000

(NOTE: The above statement excludes the outstanding indebtedness of the Lafayette Airport Commission, the Lafayette EconomicDevelopment Authority [formerly the Lafayette Harbor, Terminal and Industrial Development District], the Lafayette Public TrustFinancing Authority, Lafayette Industrial Development Board, Lafayette I-10 Corridor District at Mile Marker 103, District No. 4Regional Planning and Development Commission, and all operating and capital leases.)

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