



MLGW 2022 Budget

Memphis City Council

Approved December 21, 2021

The MLGW Board of Commissioners & Advisory Board Members



Chairman Mitch Graves



Vice - Chairman Leon Dickson Sr.



Commissioner Steven Wishnia



Commissioner Carlee McCullough, Esq

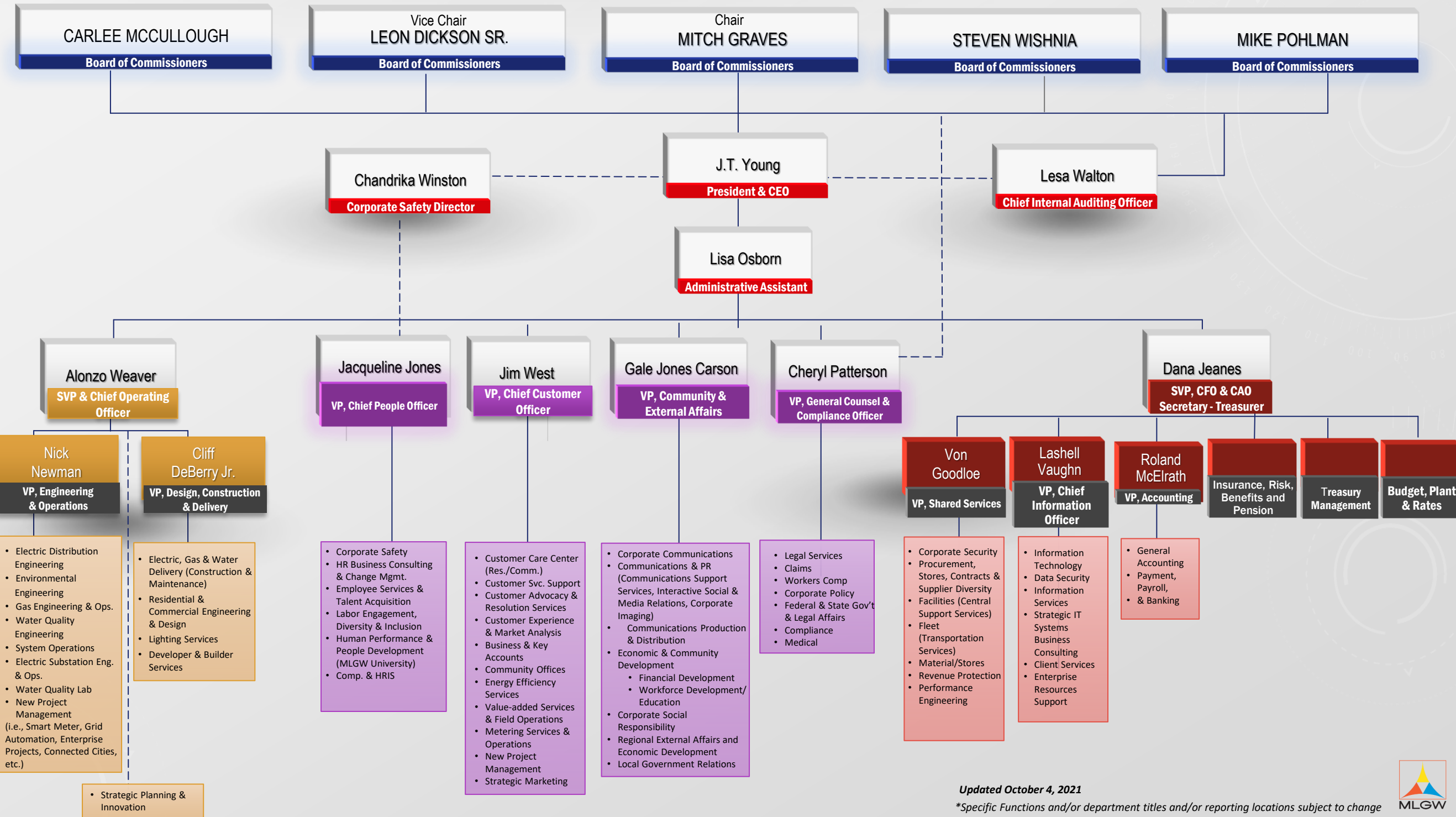


Commissioner Michael Pohlman

Advisory Board Member (*Vacant*)

Advisory Board Member (*Vacant*)

Board of Commissioners and Senior Leadership Council



Updated October 4, 2021

*Specific Functions and/or department titles and/or reporting locations subject to change



TABLE OF CONTENTS

Section	Page
Table of Contents	1
How to Read the Budget	B1-B3
Letter from the President	i-ii
MLGW and Division Leadership	L1 - I7
2022 Budget Highlights	H1
 All Divisions	
Income, Expense, and Changes in Net Position Comparison 2022 EGW	2
FERC Detail 2022 EGW	2a-2d
Capital Expenditures 2022 EGW	3
 Electric Division	
Income, Expense, and Changes in Net Position Comparison	4
FERC Detail	4a-4c
Source and Application of Funds	5
Capital Expenditures Comparison	6
Substation & Transmission – Detail	7
Transmission and Distribution System Major Projects – Detail	8
General Plant – Detail	9-10
Carryover Summary	11
 Gas Division	
Income, Expense, and Changes in Net Position Comparison	12
FERC Detail	12a-12c
Source and Application of Funds	13
Capital Expenditures Comparison	14
Production, Distribution System Major Projects, and General Plant – Detail	15
General Plant – Detail	15-16
Carryover Summary	17
 Water Division	
Income, Expense, and Changes in Net Position Comparison	18
FERC Detail	18a-18c
Source and Application of Funds	19
Capital Expenditures Comparison	20
Production System	21-22
Distribution System Major Projects – Detail	23
General Plant – Detail	23
Carryover Summary	24
 Appendix	A1-A35
Glossary	G1-G5

How to Read the Budget

INTRODUCTION

We are pleased to submit the 2022 Budget of Memphis Light, Gas and Water Division (MLGW) as required by Memphis City Ordinance #3509. This Budget has been prepared in compliance with this ordinance, which requires conformity to the Federal Energy Regulatory Commission (FERC), the regulations of any other applicable regulatory body, and in accordance with the provisions of the bond resolutions approved by the Memphis City Council.

Memphis Light, Gas and Water Division's accounting and financial practices conform to generally accepted accounting principles (GAAP), under the rules and regulations of the Governmental Accounting Standards Board (GASB) and the Financial Accounting Standards Board (FASB).

Memphis Light, Gas and Water Division was created by an amendment to the City Charter, adopted March 9, 1939. MLGW operates three separate utilities, as divisions, providing electricity and gas in the City and Shelby County. Water service is provided by MLGW in the City and, together with other municipal systems, in Shelby County. Each division operates as a separate entity for accounting and financial purposes pursuant to the City Charter. For economic reasons, activities common to all three divisions are administered jointly and costs are prorated among the divisions. The 2022 operating and capital budgets are developed simultaneously and are presented together in a combined budget. In this manner, MLGW can accomplish personnel planning and allocate resources to ensure the achievement of each strategic organization of focus.

THE BUDGET PROCESS

Memphis Light, Gas and Water Division develops the operating and capital expenditure budgets annually to coincide with its fiscal year, which extends from January 1 to December 31. The budget process begins early in the year that precedes the fiscal year for which the budget will take effect. The entire process continues for several months until final approval is obtained by the Memphis City Council.

At the onset of the process, a budget schedule is created to establish the critical deadlines for activities necessary in producing the final approved budget document. Some of the budget calendar events include planning meetings, multiple budget training sessions, capital project budget meetings and equipment budget meetings, all of which are completed before the end of June.

During July through August, requests for the upcoming budget year are submitted by organization supervisors and managers. The vice presidents are then responsible for reviewing the proposed budget and making necessary adjustments.

The proposed budget goes through several stages of formal review and approval before being finalized. The initial level of approval occurs during mid-August through early September by the members of MLGW's executive staff. A preliminary budget document is subsequently

How to Read the Budget

developed and presented to the MLGW Board of Commissioners for review and approval in September with the final budget approved by the Memphis City Council scheduled in November.

CONTENTS OF THE BUDGET DOCUMENT

This Budget document begins with the Budget Highlights which offers a summary of Total Operating Revenue, Total Operating Expense, Operating Income (Loss), Change in Net Position and the Capital Program for each Division. The information provided in the remaining sections of the Budget document is detailed below.

ALL DIVISIONS

This section supplies a comparison of the Electric, Gas and Water Division's Income, Expense & Change in Net Position and Capital Expenditures Budget for the 2022 Budget.

ELECTRIC

The first page of this section (Page 4) is the *Income, Expense, and Changes in Net Position Comparison* for the Electric Division. It provides a side-by-side view of the 2020 Actual Expenditures, 2021 Budget and the 2022 Budget.

The last column contains a Reference Number that can be cross-referenced with the Appendix, which provides a brief explanation or description of that specific line item; for example, Sales Revenue has a reference number of 4-1. The Appendix includes notes for 4-1 on page A2 stating that "this account includes projected revenue from the sale of electricity to the residential, commercial, industrial, outdoor lighting and traffic signal and interdepartmental customer classes."

The next three pages (4a-4c) provide the detailed account information for each of the line items presented on page 4; for example, the four specific accounts for Non-Sales Revenue are Forfeited Discounts, Miscellaneous Service Revenue, Other Operating Revenue and Rent from Gas/Water Property. The sum of these four accounts (Total Non-Sales Revenue) is rolled up to page 4. The detail account information provides a comparison of the 2021 Budget, 2022 Budget and the difference between the 2021 Budget and 2022 Budget.

Next is the *Source and Application of Funds*, which includes reference numbers that correlate to the Appendices which provide a description of each line item.

The *Capital Expenditures Comparison* (page 6) gives a comparison of the 2020 Actual, 2021 Budget and the 2022 Budget. Again, the last column is the Reference Number that can be used to look up explanations of each line item. The next four pages (7-10) provide information by project for each of the major line items on page 6. Each project listed has the amount that will be spent in the Budget year. Every project has a reference number that can be used to find a description of the project in the Appendix.



November 16, 2021

To Members of the MLGW Board, Memphis City Council, and Our Valued Customers:

I am honored to present the proposed FY2022 Operating and Capital Budgets for the Memphis Light, Gas and Water Division (MLGW). Amidst the ongoing COVID-19 global pandemic sweeping the globe, MLGW is planning for its future; a brighter future focused on improved service reliability and customer care. The proposed budgets are built upon the 5-year financial plan adopted by MLGW in fiscal year 2020. The primary objectives of the plan are focused on improving the reliability of our services, modernizing our facilities, operating more efficiently and ultimately delivering more value to our customers. The proposed FY2022 Budget will continue the progress toward these goals which has been slowed due to impacts of the global pandemic.

The proposed budget will provide resources needed to deliver reliable, high quality, compassionate services to our customers while maintaining affordable rates relative to other major utilities across the country. In addition, this budget will allow MLGW to maintain its strong financial position, as reflected in the Division's solid financial reserves and impressive funding ratio for both its Pension Plan and Other Post-Employment Benefits Plan.

This budget is also consistent with the MLGW Way Forward, an initiative focused on taking into account the 2019 report recommendations offered by Baker Tilly, a well-recognized consultant in the utility industry. In its report to the MLGW Board, the consultant identified operating efficiencies that MLGW should pursue to reduce its operating costs. The consultant also provided an assessment of the condition and needs of MLGW's infrastructure. During 2022 MLGW will look to re-calibrate some of the targets initially developed from the study in keeping with the recognition of maintaining the balance of meeting ever-increasing customer and stakeholder expectations while also meeting our cost containment targets committed to previously.

The 2022 Operating and Capital Budgets are developed simultaneously and are presented together in a combined budget. In this manner, MLGW can accomplish personnel planning and allocate resources to ensure the achievement of specific goals in each strategic area of focus. The major highlights of the 2022 Budget are as follows:

- A net decrease of 53 in full-time equivalent positions versus the 2020 reference budget
- Continued deployment of Smart infrastructure so as to improve electrical reliability and outage restoration
- Continued capital reinvestment in our infrastructure
- Development of a comprehensive rehabilitation plan for our water pumping stations

- Major upgrade of security infrastructure to monitor and protect critical system assets

The Total Operating and Capital Budget for 2022 is \$1.9 billion. Almost \$1.1 billion or approximately 65.7% percent of operating expense is budgeted for purchased power and gas costs. MLGW's operations and maintenance expenses total \$418.6 million, 24.3% percent of the total Operating Budget. MLGW's payment in lieu of taxes to local governments is projected to be \$71.2 million.

MLGW's capital program of \$229.9 million reflects our commitment toward modernizing and maintaining the integrity and reliability of our system infrastructure.

In conclusion, the 2022 Budget demonstrates MLGW's continued commitment to provide high quality, reliable service to our customers in a cost-effective and efficient manner.

Respectfully,

Jarl "J.T." Young
President and CEO



MEMPHIS LIGHT, GAS AND WATER DIVISION

Memphis Light, Gas and Water is owned by the City of Memphis and is the nation's largest three-service municipality in the United States with more than 436,000 customers. MLGW operates three separate utilities, as divisions, providing electricity and gas in the City and Shelby County and water to the City in conjunction with other municipal systems in Shelby County. Memphis Light Gas and Water provides electricity to over 436,000 electric customers, over 315,000 gas customers, and water to over 257,000 customers.

Memphis Light, Gas and Water receives electricity from the Tennessee Valley Authority (TVA) and represents approximately 11 percent of TVA's total electric power load. Memphis Light, Gas and Water acts as a pass through of the electric rates, therefore, not realizing any profit on the sale of electricity.

Memphis Light, Gas and Water provides natural gas to its customers via 3 natural gas pipelines. MLGW buys natural gas from a variety of natural gas suppliers in a mixture of monthly, daily, seasonally, and long-term contracts while hedging gas purchases to manage the price risk associated with the market price volatility of natural gas.

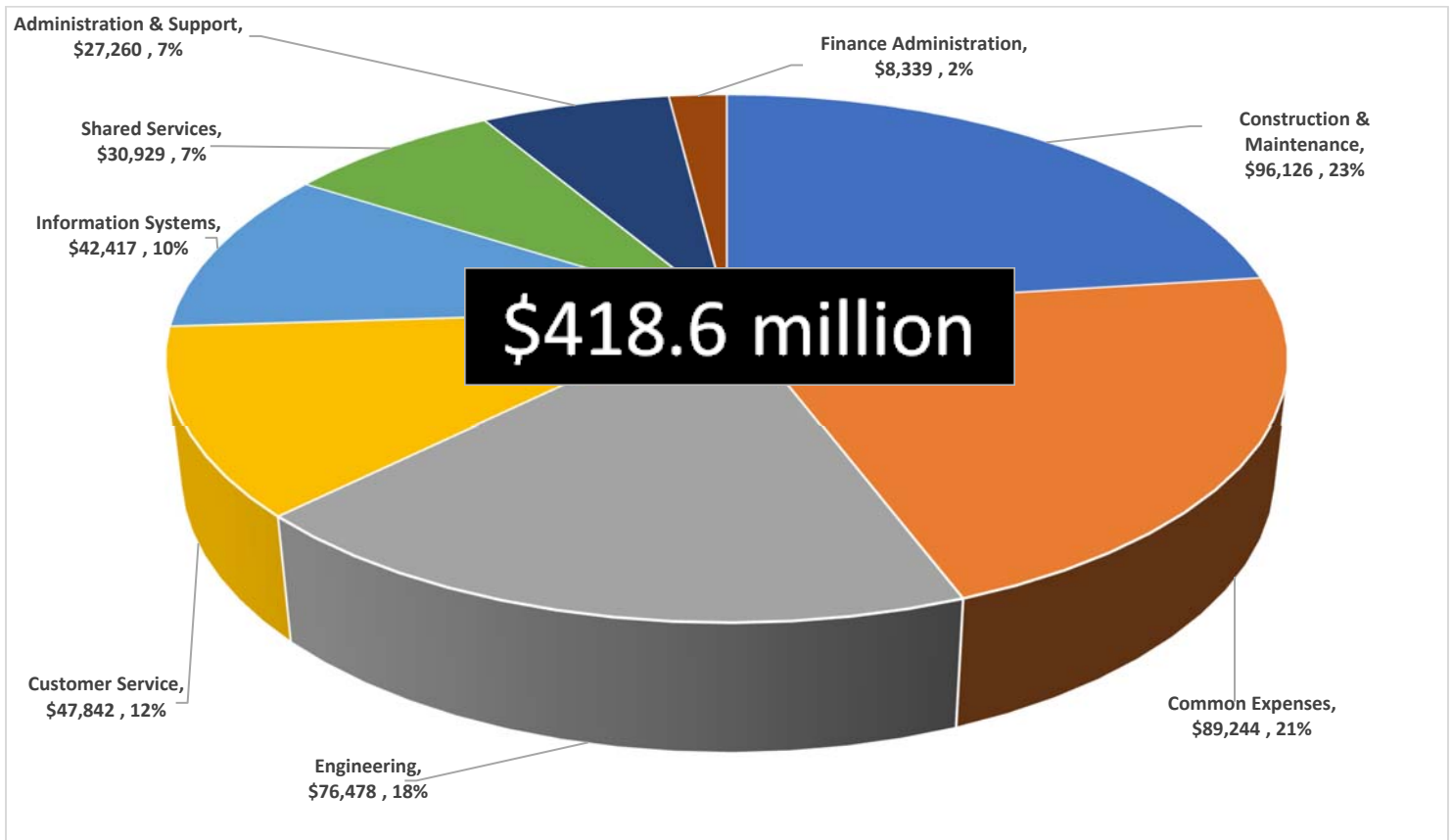
While some utilities obtain drinking water from surface lakes or rivers, MLGW supplies water from the Memphis aquifer, beneath Shelby County. The Memphis aquifer is a treasure to the Memphis and Shelby County areas. The Memphis aquifer contains more than 100 trillion gallons of water that are more than 2,000 years old. MLGW operates this artesian well system by utilizing pumping stations and wells to deliver water to its customers.

Memphis Light, Gas and Water is comprised of various organizations and disciplines to ensure safe, reliable, and friendly service to our customers. MLGW is led by President and CEO J.T. Young with oversight provided by the MLGW Board of Commissioners. President Young has a strong affinity for safety and customer services. His leadership principles are exuded through his leadership team. MLGW leadership is comprised of the Senior Leadership Committee who oversee the daily operations of the Division.

It takes a lot to operate a utility of this magnitude. Many think of the Division in terms of utilities only; however, daily operations include internal auditing, legal counsel, communication of community and external affairs, finance, information services and technology, human resources, engineering, construction, and customer services.

Memphis Light, Gas and Water develops the operating and capital expenditure budgets annually to coincide with its fiscal year. The annual budget considers the needs of the Division's operational units to assist the utility in its mission, *"To safely deliver services that create and sustain superior customer experiences"*. The graph below depicts each operational unit's contribution to the operating and maintenance budget of the utility and is followed by an executive summary of the utility's leadership.

2022 Operations & Maintenance Budget by Organization





J.T. Young, President and Chief Executive Officer, is responsible for overseeing the day-to-day operations of MLGW. Mr. Young joined MLGW in 2018 and is the 11th President to lead the utility. Mr. Young's diverse utility experience includes engineering, customer service, marketing, sales, risk management, information technology, finance and supply chain management. Immediately prior to assuming his responsibilities at MLGW, he served as Gulf Power Company's Customer Service and Marketing General Manager.

Mr. Young holds a bachelor's degree in electrical engineering from the University of Florida, an MBA from the University of West Florida and he is a graduate of Harvard Business School's General Management Program.

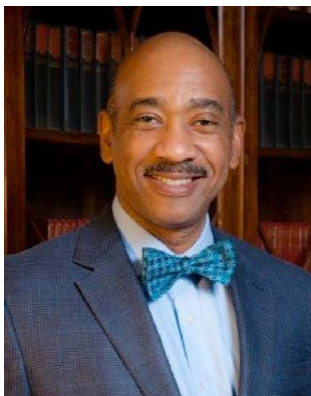
Mr. Young seeks to lead by example and works to set the appropriate expectations across the Division based on MLGW values of safety, integrity, ownership, inclusion, and compassionate service. He is also determined to ensure that our employees have access to the full array of resources

needed to effectively execute MLGW's mission: ***To safely deliver services that create and sustain superior customer experiences***. As President and CEO, Young commits to effectively engage with the MLGW Board, as well as other elected officials and key stakeholders across the community. He also commits to the importance of executing key objectives in a manner that promotes safety, ethical behavior, professionalism and efficiency. Safety leadership is the paramount element among the objectives and policies, procedures, programs and plans necessary to encompass the safety perspective. In addition, to build and maintain trust, Senior Leadership must operate with integrity, must be accountable, inclusive and make the best decisions on behalf of the entire Division while demonstrating compassionate service with our employees, our customers and all stakeholders with respect, courtesy and professionalism. By investing in the Division's greatest asset - our employees, MLGW hopes to build on the legacy the Division solidified when it was founded in the Depression Era and to create a dynamic utility company that not only provides reliable service, but also provides great value for MLGW customers.



Dana Jeanes, Senior Vice-President, Chief Financial Officer and Chief Administrative Officer (Secretary-Treasurer), is responsible for establishing, monitoring and maintaining company-wide financial and administrative objectives, policies, programs, and practices for MLGW. Mr. Jeanes joined MLGW in December 1987 and has served as Energy Engineer;

Rates Engineer; Supervisor, Rates and Regulatory Affairs; Manager, Budget, Plant and Rates; Director of Analysis, Strategy, and Performance, and Controller. Mr. Jeanes received his Bachelor of Science in electrical engineering from Christian Brothers University in 1979 and a Master of Business Administration degree with emphasis on finance and accounting from the University of Memphis in 1994. He is a licensed professional engineer in Tennessee. He is a Certified Public Accountant and a member of the American Institute of Certified Public Accountants. Mr. Jeanes serves in several industry associations. He is a Board member and past President of the Tennessee Municipal Electric Power Association. He also serves on the Tennessee Valley Public Power Association Government Relations Committee and Rates and Contracts Committee. Mr. Jeanes also serves as a Director on the Board of the Better Business Bureau of the Mid-South.



Alonzo Weaver III, Senior Vice-President and Chief Operating Officer, is responsible for managing and coordinating all engineering functions, facilities operations and loss prevention, electric substations, water pumping stations, gas regulators, and wells. Mr. Weaver joined MLGW in 1983 as an Engineering Assistant in Electric Operations and was promoted to Operations Assistant in that department in 1987. Mr. Weaver later served as Assistant Manager for the North Service Center before being promoted to Manager, Electric Operations in 1992. He was promoted to Vice President, Operations in 1997 and has served in various executive roles since that time. Mr. Weaver graduated from Rensselaer Polytechnic Institute with a B.S. in Mechanical Engineering in 1983 and attended the University of Memphis where he received an MBA in 1997. Mr. Weaver also attended Rhodes College Institute for Executive Leadership and completed the MLGW Executive Development Program in 1988. Mr. Weaver is active in several industry associations, such as the American Public Power Association, the American Public Gas Association, the American Association

of Blacks in Energy, the American Gas Association and the North American Transmission Forum. He serves on the boards of the Southern Gas Association, SERC Reliability Corporation and Junior Achievement.



Cheryl W. Patterson, Vice-President and General Counsel (Compliance Officer)

is responsible for advising the Board and MLGW staff concerning all legal obligations and privileges, serves as Chief Ethics Officer for MLGW, and performs other legal services for MLGW. Mrs. Patterson joined MLGW in 2008. Previously, she served as partner in the law firm of Wyatt, Tarrant & Combs, LLP, and was a member of the firm's Financial Institutions & Public Finance Service Teams. Mrs. Patterson has served as bond counsel and underwriter's counsel to municipalities and non-profits. She is a graduate of Wellesley College with a Bachelor of Arts Degree in Political Science and French and a 1984 graduate of Harvard Law School. She is a member of the American, Tennessee and Memphis Bar Associations as well as the National Association of Bond Lawyers. She is licensed to practice law in Tennessee and Pennsylvania. Mrs. Patterson is active in the Tennessee Valley Public Power Association Government Relations Committee and serves on the boards of several non-profit organizations.



Roland McElrath, Vice-President of Accounting, is responsible for directing MLGW's accounting function and departments engaged in general accounting, customer payments, payroll, and banking activities. Mr. McElrath joined MLGW in August 2012. Mr. McElrath served as the Finance Director for the City of Memphis, from 1996 through 2001 and again from 2005 through 2012. He has also held the position of Associate Superintendent of Business Operations at Memphis City Schools from 2001 through 2003 and was Chief Financial Officer at the Memphis Housing Authority from 2003 through 2005. Mr. McElrath received his bachelor's degree in accounting from the University of Tennessee at Martin in 1982 and earned a Master of Business Administration degree in Finance from the University of Memphis in 1989. He is a Certified Public Accountant and a Certified Municipal Finance Officer.



Cliff DeBerry Jr., Vice-President of Design, Construction and Delivery, is responsible for managing and coordinating the delivery of construction and maintenance operations at Memphis Light, Gas and Water as well as Residential and Commercial Engineering Design, Lighting Services, and Builder and Developer Services. Mr. DeBerry joined MLGW in 1987 as a Level I Customer Engineer and was promoted to Assistant Manager for the Hickory Hill Service Center in 2000. He later served as Manager of Electric Engineering, Manager of Hickory Hill Service Center, and Director of Analysis, Strategy and Performance before being promoted to his current position. Mr. DeBerry graduated from Christian Brothers College (now CBU) with a B.S. in Electrical Engineering in 1987 and additionally received an MBA in Finance in 1994 from Memphis State University (now University of Memphis). He is a registered Professional Engineer licensed in the state of Tennessee. Mr. DeBerry is a Commissioner for the West Tennessee Seismic Safety Commission, Board Member for the Mid-South Food Bank,

Managing Operating Committee Member for the American Gas Association and an active member of the Engineers Club of Memphis where he served on the Board of Directors. Additionally, Mr. DeBerry has served as President of the American Association of Blacks in Energy and is a member of Alpha Phi Alpha Fraternity. He is a supporter of many community endeavors such as Junior Achievement, the United Way, the MS 150 Bike -A-Thon and Ride for Life.



Nicholas Newman, Vice-President of Engineering and Operations, is responsible for managing and coordinating all engineering and operational divisions for Memphis Light, Gas and Water. Mr. Newman joined MLGW in 1988 as a Service Engineer in the Customer Engineering Department. Mr. Newman previously served as a District Engineer; Supervisor of Engineering and Heavy Equipment; Assistant Manager and Manager of the South Service Center. Additionally, Mr. Newman served as the Project Manager for the Energy Conservation Project at NSA Mid- South. Mr. Newman is a native Memphian and graduate of Frayser High School. Mr. Newman earned his Bachelor of Science in Electrical Engineering and a MBA from the University of Memphis. Mr. Newman holds a Grade 2 Water Distribution License from the State of Tennessee. Mr. Newman is active in the American Water Works Association (AWWA), Tennessee Association of Utility Districts (TAUD) and several other associations. He is on the board of TAUD where he serves as Vice President and is the Chairperson for the legislative team.

He also serves on the Tennessee Water/Wastewater Financing Board.



Von Goodloe, Vice-President of Shared Services, is responsible for managing Corporate Security, Facilities (Central Support Services), Transportation and Supply Operations, Procurement, Contracts and Supplier Diversity and Corporate Safety. Dr. Goodloe joined MLGW in 2010 as Vice President of Human Resources. Dr. Goodloe graduated from Hampton University with a B.A. in Physics in 1983, attended Trevecca Nazarene College in Nashville where he received an MEA degree in 1994, and received an EDS degree in Administration in 2009 from Union University. He also received his doctorate in education from Union University in 2011. Dr. Goodloe has his Senior Professional in Human Resources (SPHR) certification from the Society for Human Resources Management (SHRM) and Certified Labor Relations Professional (CLRP) certification from the National Public Employer Labor Relations Association (NPELRA). He is an active member of the Society for Human Resources Management (SHRM) and the National Public Employer Labor Relations Association (NPELRA). He is an active member of Alpha Phi

Alpha fraternity and a supporter of community agencies such as Life Blood, The United Way, and Junior Achievement.



Jacqueline Jones, Vice President and Chief People Officer, is responsible for developing and executing human resource strategy in support of the overall business plan and strategic direction of the organization, specifically in the areas of succession planning, talent management, change management, organizational and performance management, training and development, and compensation. She joined MLGW in December 2020. Prior to joining MLGW, she served in executive roles at Kraft Foods, Inc and Lennox International.

Jackie has a strong track record of human resource experience supporting management teams and employees through rapid change and growth. She is experienced in developing and executing strategic and tactical programs, driving enterprise people strategy, delivering on commitments, and creating a winning culture. Her well rounded experience includes working in corporate and business unit environments as well as working in union/non-union manufacturing plants including both line and staff roles. Jackie's leadership style is highlighted by her ability to be a strategic thinker, courageous change agent and action-oriented leader with a high degree of interpersonal skills and credibility. Jones is a graduate of the University of Memphis where she received a BBA degree in Production Operations Management. She also holds a MBA from Edgewood College in Madison, WI.



Lashell Vaughn, Vice-President and Chief Information Officer, is responsible for information technology and services, data security, client services and enterprise resources support. Mrs. Vaughn joined MLGW in June 2011. Mrs. Vaughn previously held the position of Vice President of Information Technology with Hilton Worldwide. She has more than 35 years of experience in Information Technology, including client management, application development, data center operation, network and telecommunication, and security and compliance. Vaughn received a Master of Science in Computer Science from Christian Brothers University and a Bachelor of Science in Computer Science from Mississippi State University. She serves on the Dean's Advisory Council for the Mississippi State University Bagley College of Engineering and is Chairman of the Board for the Greater Memphis IT Council. She is a member of the Institute of Electronics Engineers, Inc. (IEEE) and the American Society for Engineering Education (ASEE).



Jim West, Vice-President and Chief Customer Officer, is responsible for customer service, community offices, energy efficiency, metering & billing, key accounts, and customer advocacy. Mr. West joined MLGW in 2018. Previously he was the Assistant General Manager of Customer and Energy Services at Snohomish County Public Utility District in Everett, Washington where he spent nine years. Prior to joining Snohomish County PUD, Mr. West was Director of Product Management at CURRENT Group, LLC, a smart grid solutions provider based in Washington, D.C. For more than 20 years Mr. West was at the Tennessee Valley Authority in senior positions in customer service, research & technology development, and human resources. Mr. West received an MBA and a B.S. in Economics from the University of Tennessee.



Gale Jones Carson, Vice-President of Community & External Affairs, is responsible for Economic & Community Development, Regional External Affairs, local government relations, employee and public communications programs, customer communications, media and community relations, marketing communications, crisis communications, social media, website management, graphic arts, printing, mail services and distribution operations, and the PBX (Private Branch Exchange) telephone operations. Ms. Carson rejoined MLGW in January 2007 as the Director of Corporate Communications after working as Executive Assistant and Chief Spokesperson for the City of Memphis Mayor for almost seven years. Prior to working for the Mayor, she worked in Corporate Communications at FedEx for 16 years. Ms. Carson worked in public relations for MLGW for more than six years prior to joining FedEx. A veteran of public relations, Ms. Carson has more than four decades of journalism/public relations/crisis communications and community relations

experience. She also has experience in economic development. In addition to her experience at MLGW and FedEx, for many years she was a freelance writer for a couple of local weekly publications. Ms. Carson created, produced, and hosted the local cablevision program, Memphis Style Politics, for approximately 10 years. Currently, she is serving as President of the Memphis & Shelby County Film & Tape Commission. Ms. Carson serves as Vice President of the NAACP Memphis Branch's Board of Directors, is a member of the Community Foundation of Greater Memphis Board of Governors, Women's Foundation for a Greater Memphis Board of Directors, and is a member of the IWF/TWF/MWF (International Women's Forum/Tennessee Women's Forum/Memphis Women's Forum). Among the many professional, civic, and political awards she has received, her most cherished are the Memphis Business Journal's 2017 Super Women in Business Award: the Girls, Inc. "She Knows Where She's Going" award; the April 4th Foundation's H. Ralph Jackson Trailblazer Award; the NBA Grizzlies' Community Heroes Award; the Silver Star Achievers Award; Who's Who in Memphis Twitter; the Ruby R. Wharton Outstanding Women Award for Public Awareness; the 2015 Keepers of the Dream Award; the 2015 Kindle Award; the Girl Scouts Heart of the South's One Smart Cookie Award; and the University of Memphis Alumni Association Journalism and Strategic Media Outstanding Alumni Award. Ms. Carson has also received numerous professional awards related to her work. A native of Memphis, Ms. Carson is a graduate of the Leadership Memphis Class of 1998, graduate of New Memphis Leadership and of the University of Memphis where she earned a bachelor's degree in broadcast journalism.



Lesa Walton, Chief Internal Auditing Officer, is responsible for the overall operations of Internal Auditing functions to include developing, scheduling, and directing financial, operational, and administrative audit functions. This includes analyzing, reviewing and appraising the adequacy and effectiveness of system technologies and internal control for safeguarding MLGW's funds and assets. Walton joined MLGW in 2001 and has served as an Auditor, Senior Auditor, Supervisor of Management Accounting, General Auditor and most recently as Audit Director.

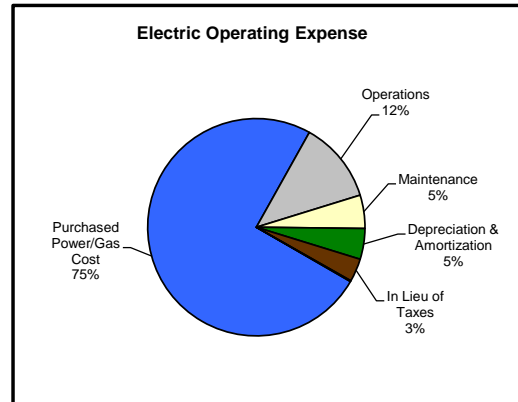
She received her B.S. in Accounting from the University of Arkansas at Little Rock in 1992, and a Master of Professional Accountancy from Jackson State University in 1994. She received her Certified Public Accountant (CPA) designation in 1998. Walton's previous employers include TruGreen Chemlawn, a division of ServiceMaster, Inc., The Kroger Company and United American of Tennessee. She is a member of the American Institute of Certified Public Accountants (AICPA), Tennessee Society of Certified Public Accountants (TSCPA) and the Institute of Internal Auditors (IIA) where she serves as IIA Memphis Board of Governors. She is a supporter of community agencies such as The United Way, MIFA, and Junior Achievement. Walton is an active member of White Stone Missionary Baptist Church serving as Co-Chairperson of the Trustee Board, Chairperson of the Scholarship Committee and member of the Budget Committee.

2022 MLGW BUDGET HIGHLIGHTS

Page H1

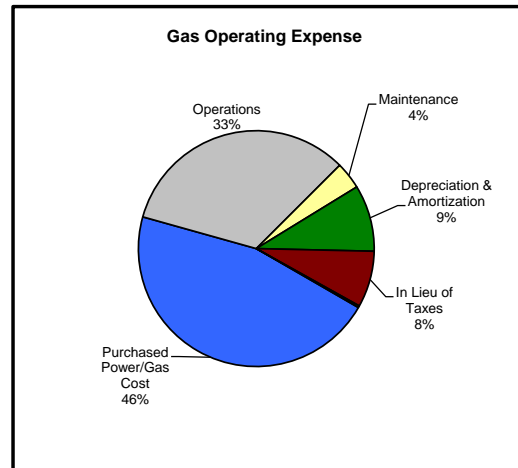
ELECTRIC DIVISION (In Thousands)

Total Operating Revenue	\$ 1,349,595
Purchased Power	\$ 1,007,980
Total O&M Expense	\$ 230,146
Other Operating Expense	\$ 109,774
 Total Operating Expense	 \$ 1,347,900
Operating Income (Loss)	\$ 1,695
Change in Net Position	\$ 34,153
 CAPITAL PROGRAM	 \$ 155,782



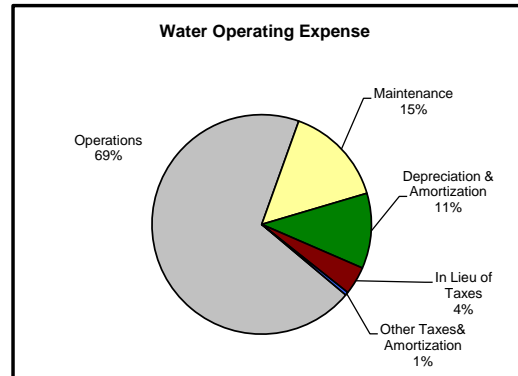
GAS DIVISION (In Thousands)

Total Operating Revenue	\$ 263,059
Purchased Gas	\$ 121,103
Total O&M Expense	\$ 97,122
Other Operating Expense	\$ 44,995
 Total Operating Expense	 \$ 263,220
Operating Income (Loss)	\$ (161)
Change in Net Position	\$ (3,003)
 CAPITAL PROGRAM	 \$ 39,759



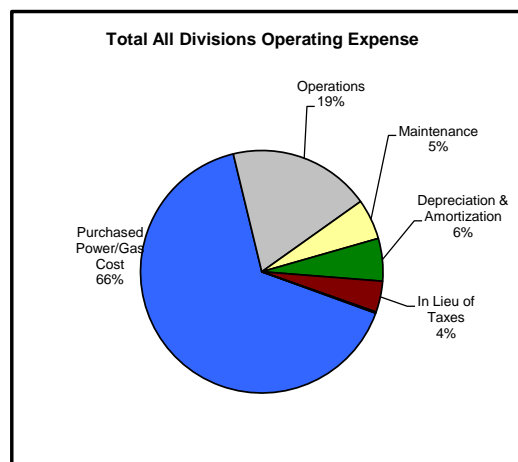
WATER DIVISION (In Thousands)

Total Operating Revenue	\$ 128,003
Total O&M Expense	\$ 91,367
Other Operating Expense	\$ 17,004
 Total Operating Expense	 \$ 108,371
Operating Income (Loss)	\$ 19,632
Change in Net Position	\$ 17,121
 CAPITAL PROGRAM	 \$ 34,355



ALL DIVISIONS (In Thousands)

TOTAL OPERATING REVENUE	\$ 1,740,657
TOTAL PURCHASED POWER & GAS	\$ 1,129,083
TOTAL O&M EXPENSE	\$ 418,635
TOTAL OTHER OPERATING EXPENSE	\$ 171,773
 TOTAL OPERATING EXPENSE	 \$ 1,719,491
OPERATING INCOME	\$ 21,166
CHANGE IN NET POSITION	\$ 48,271
 TOTAL CAPITAL PROGRAM	 \$ 229,896





ALL DIVISIONS

MEMPHIS LIGHT, GAS AND WATER DIVISION
INCOME, EXPENSE, AND CHANGES IN NET POSITION COMPARISON
FOR CALENDAR YEAR OF 2022

ALL DIVISIONS

PAGE 2

DESCRIPTION	THOUSANDS OF DOLLARS			
	ELECTRIC DIVISION	GAS DIVISION	WATER DIVISION	TOTAL
<u>OPERATING REVENUE</u>				
Sales Revenue	1,326,016	237,254	123,733	1,687,003
Revenue Adjustment for Uncollectibles	(4,366)	(1,012)	(886)	(6,264)
Non-Sales Revenue	27,945	26,817	5,156	59,918
OPERATING REVENUE	1,349,595	263,059	128,003	1,740,657
<u>OPERATING EXPENSE</u>				
Purchased Power	1,007,980	-	-	1,007,980
Purchased Gas	-	120,035	-	120,035
Compressed Natural Gas (CNG)	-	12	-	12
Liquefied Natural Gas (LNG)	-	1,056	-	1,056
Production Expense	-	1,430	14,389	15,819
Transmission Expense	7,716	-	-	7,716
Distribution Expense	43,791	28,918	14,892	87,601
Customer Accounts Expense	17,067	11,553	8,093	36,713
Customer Service & Information Expense	2,183	1,845	1,138	5,166
Sales Expense	2,189	418	315	2,922
Administrative & General Expense	90,323	43,137	36,353	169,813
OPERATING EXPENSE	1,171,249	208,404	75,180	1,454,833
<u>MAINTENANCE EXPENSE</u>				
Transmission Expense	6,135	-	-	6,135
Production Expense	-	387	3,215	3,602
Distribution Expense	55,796	7,848	9,123	72,767
Administrative & General Expense	4,946	1,586	3,849	10,381
MAINTENANCE EXPENSE	66,877	9,821	16,187	92,885
<u>OTHER OPERATING EXPENSE</u>				
Depreciation Expense	58,967	18,642	11,564	89,173
Payment in Lieu of Taxes	46,372	20,338	4,500	71,210
F.I.C.A. Taxes	1,706	652	488	2,846
Amortization of Legacy Meters	1,192	1,423	452	3,067
Amortization of Software	1,537	3,940	-	5,477
OTHER OPERATING EXPENSE	109,774	44,995	17,004	171,773
TOTAL OPERATING EXPENSE	1,347,900	263,220	108,371	1,719,491
<u>INCOME</u>				
Operating Income	1,695	(161)	19,632	21,166
Other Income	41,600	1,045	1,049	43,694
Reduction of Plant Cost Recovered through CIAC	(28,199)	(5,005)	(3,054)	(36,258)
NET INCOME BEFORE DEBT EXPENSE	15,096	(4,121)	17,627	28,602
<u>DEBT EXPENSE</u>				
Interest Expense - Long Term Debt	12,531	5,571	4,609	22,711
Amortization of Debt Discount & Expense	(3,389)	(1,684)	(1,049)	(6,122)
TOTAL DEBT EXPENSE	9,142	3,887	3,560	16,589
NET INCOME AFTER DEBT EXPENSE	5,954	(8,008)	14,067	12,013
Contributions in Aid of Construction	28,199	5,005	3,054	36,258
CHANGE IN NET POSITION	34,153	(3,003)	17,121	48,271

MEMPHIS LIGHT, GAS AND WATER DIVISION
INCOME, EXPENSE, AND CHANGES IN NET POSITION COMPARISON
FOR CALENDAR YEAR OF 2022

ALL DIVISIONS

PAGE 2a

DESCRIPTION	THOUSANDS OF DOLLARS			
	ELECTRIC DIVISION	GAS DIVISION	WATER DIVISION	TOTAL
<u>OPERATING REVENUE</u>				
Sales Revenue	1,326,016	237,254	123,733	1,687,003
Revenue Adjustment for Uncollectibles	(4,366)	(1,012)	(886)	(6,264)
Non-Sales Revenue				
Forfeited Discounts	10,585	2,800	1,508	14,893
Miscellaneous Service Revenue	9,856	2,016	1,668	13,540
Cross Connection Revenue	-	-	1,392	1,392
Other Operating Revenue	1,596	612	444	2,652
Compressed Natural Gas (CNG)	-	36	-	36
Liquefied Natural Gas (LNG)	-	2,568	-	2,568
Rent from Electric/Gas/Water Property	5,908	8,387	144	14,439
Transported Gas	-	10,398	-	10,398
Total Non-Sales Revenue	27,945	26,817	5,156	59,918
OPERATING REVENUE	1,349,595	263,059	128,003	1,740,657
<u>OPERATING EXPENSE</u>				
Purchased Power	1,007,980	-	-	1,007,980
Purchased Gas	-	120,035	-	120,035
Compressed Natural Gas (CNG)	-	12	-	12
Liquified Natural Gas (LNG)	-	1,056	-	1,056
Production Expense				
Chemicals	-	-	950	950
Fuel or Power Purchased for Pumping	-	-	7,449	7,449
Miscellaneous Expense	-	-	2,456	2,456
Operations Production Water Treatment	-	-	58	58
Operation Labor and Expenses	-	1,287	2,922	4,209
Operation Supervision and Engineering	-	143	237	380
Pumping Labor and Expenses	-	-	317	317
Total Production Expense	-	1,430	14,389	15,819
Transmission Expense				
Load Dispatching	665	-	-	665
Miscellaneous Transmission Expenses	1,446	-	-	1,446
Operation Supervision and Engineering	5,203	-	-	5,203
Station Expenses	402	-	-	402
Underground Transmission Line Expenses	-	-	-	-
Total Transmission Expense	7,716	-	-	7,716
Distribution Expense				
Customer Installation Expenses	-	5,215	2,796	8,011
Distribution Load Dispatching Expense	1,634	790	-	2,424
Mains and Services	-	3,985	-	3,985
Measuring and Regulating Expenses	-	79	-	79
Meter and House Regulator Expenses	812	3,493	1,392	5,697
Miscellaneous Distribution Expenses ⁽¹⁾	24,196	11,615	8,075	43,886
Operation Supervision and Engineering	4,156	3,736	2,181	10,073
Overhead Distribution Line Expense	5,289	-	-	5,289
Rents	-	5	2	7
Services on Customers' Premises	5,132	-	-	5,132
Station Expenses	1,544	-	-	1,544
Storage Facilities	-	-	103	103
Street Lighting and Signal System Expenses	493	-	-	493
Transmission and Distribution Lines	-	-	343	343
UG Distribution	535	-	-	535
Total Distribution Expense	43,791	28,918	14,892	87,601
⁽¹⁾ Includes, but not limited to, the following items: Accrued vacation, absences such as holiday and sick leave, lost time due to bad weather, stand-by pay, and contract services.				

MEMPHIS LIGHT, GAS AND WATER DIVISION
INCOME, EXPENSE, AND CHANGES IN NET POSITION COMPARISON
FOR CALENDAR YEAR OF 2022

ALL DIVISIONS

PAGE 2b

DESCRIPTION	THOUSANDS OF DOLLARS			
	ELECTRIC DIVISION	GAS DIVISION	WATER DIVISION	TOTAL
<u>OPERATING EXPENSE (Continued)</u>				
Customer Accounts Expense				
Customer Order, Records and Collection Expenses	16,020	10,111	7,022	33,153
Meter Reading Expenses	908	1,314	945	3,167
Supervision-Customer Accounting and Collection	139	128	126	393
Total Customer Accounts Expense	17,067	11,553	8,093	36,713
Customer Service & Information Expense				
Customer Assistance Expenses	1,178	811	609	2,598
Informational and Instructional Advertising Expenses	163	54	247	464
Miscellaneous Customer Service & Informational Expenses	485	686	-	1,171
Supervision-Customer Service and Information	357	294	282	933
Total Customer Service & Information Expense	2,183	1,845	1,138	5,166
Sales Expense				
Miscellaneous Sales Expenses	2,189	418	315	2,922
Total Sales Expense	2,189	418	315	2,922
Administrative & General Expense				
Administrative and General Salaries	18,703	7,548	5,258	31,509
Administration Expenses Transferred to Capital	(7,255)	(1,314)	(1,532)	(10,101)
Pension Expense	11,518	4,816	3,560	19,894
Other Active & Retiree Benefits	21,815	11,981	8,621	42,417
Other Post Employment Benefits Funding	2,423	1,013	749	4,185
Injuries and Damages	3,031	1,847	1,442	6,320
Miscellaneous General Expenses ⁽²⁾	11,147	4,661	4,304	20,112
Office Supplies and Expenses	5,614	2,328	1,613	9,555
Outside Services Employed	15,456	5,898	7,431	28,785
Property Insurance	1,856	945	671	3,472
Rents-Miscellaneous	6,015	3,414	4,236	13,665
Total Administrative & General Expense	90,323	43,137	36,353	169,813
OPERATING EXPENSE	1,171,249	208,404	75,180	1,454,833
<u>MAINTENANCE EXPENSE</u>				
Transmission Expense				
Maintenance of Overhead Transmission Lines	1	-	-	1
Maintenance of Station Equipment	1,431	-	-	1,431
Maintenance of Underground Transmission Lines	699	-	-	699
Maintenance of Structures and Improvements	124	-	-	
Maintenance Supervision and Engineering	3,880	-	-	3,880
Total Transmission Expense	6,135	-	-	6,011
Production Expense				
Maintenance of Other Equipment	-	90	-	90
Maintenance of Pumping Equipment	-	-	862	862
Maintenance of Structures and Improvements	-	73	-	73
Maintenance of Water Treatment Equipment	-	-	1,288	1,288
Maintenance of Wells	-	-	954	954
Maintenance Supervision and Engineering	-	224	111	335
Total Production Expense	-	387	3,215	3,602

⁽²⁾ Includes, but not limited to, the following items: Mail distribution, property appraisals, security and janitorial services, and fuel use by MLGW.

MEMPHIS LIGHT, GAS AND WATER DIVISION
INCOME, EXPENSE, AND CHANGES IN NET POSITION COMPARISON
FOR CALENDAR YEAR OF 2022

ALL DIVISIONS

PAGE 2c

DESCRIPTION	THOUSANDS OF DOLLARS			
	ELECTRIC DIVISION	GAS DIVISION	WATER DIVISION	TOTAL
<u>MAINTENANCE EXPENSE (Continued)</u>				
Distribution Expense				
Maintenance of Hydrants	-	-	604	604
Maintenance of Line Transformers	1,866	-	-	1,866
Maintenance of Mains	-	4,809	-	4,809
Maintenance of Meters	2,050	300	3,144	5,494
Maintenance of Miscellaneous Distribution Plant	539	-	39	578
Maintenance of Overhead Distribution Lines	29,632	-	-	29,632
Maintenance of Services	-	1,146	1,352	2,498
Maintenance of Station Equipment	2,082	-	-	2,082
Maintenance of Street Lighting and Signal System	4,470	-	-	4,470
Maintenance of Gas Distribution Facilities	-	-	-	-
Maintenance of Transmission and Distribution Mains	-	-	3,984	3,984
Maintenance of Underground Distribution Lines	12,087	-	-	12,087
Maintenance Supervision and Engineering	3,070	88	-	3,158
Measuring and Regulating Equipment Expenses	-	1,505	-	1,505
Total Distribution Expense	55,796	7,848	9,123	72,767
Administrative & General Expense				
Maintenance of General Plant	4,691	1,473	3,849	10,013
Facilities Maintenance Expense	255	113	-	368
Total Administrative & General Expense	4,946	1,586	3,849	10,381
MAINTENANCE EXPENSE	66,877	9,821	16,187	92,885
<u>OTHER OPERATING EXPENSE</u>				
Depreciation Expense	58,967	18,642	11,564	89,173
Payment in Lieu of Taxes	46,372	20,338	4,500	71,210
F.I.C.A. Taxes	1,706	652	488	2,846
Amortization of Legacy Meters	1,192	1,423	452	3,067
Amortization of Software	1,537	3,940	-	5,477
OTHER OPERATING EXPENSE	109,774	44,995	17,004	171,773
TOTAL OPERATING EXPENSE	1,347,900	263,220	108,371	1,719,491
<u>INCOME</u>				
Operating Income	1,695	(161)	19,632	21,166
Other Income				
Expenses of Merchandising, Jobbing & Contracts	-	(2,588)	-	(2,588)
Revenues from Merchandising, Jobbing & Contracts	-	1,304	-	1,304
Revenues from Non-Utility Property	-	-	-	-
Revenues from Common Transportation Equipment	-	-	-	-
Revenues from Sinking & Other Funds-Interest Income	3,500	2,000	500	6,000
Medicare Part D Refund	294	122	85	501
Non-Operating Income - TVA Transmission Credit	36,000	-	-	36,000
Miscellaneous Non-Operating Income	1,806	207	464	2,477
Total Other Income	41,600	1,045	1,049	43,694
Contributions in Aid of Construction	(28,199)	(5,005)	(3,054)	(36,258)
NET INCOME BEFORE DEBT EXPENSE	15,096	(4,121)	17,627	28,602

**MEMPHIS LIGHT, GAS AND WATER DIVISION
INCOME, EXPENSE, AND CHANGES IN NET POSITION COMPARISON
FOR CALENDAR YEAR OF 2022**

ALL DIVISIONS

PAGE 2d

DESCRIPTION	THOUSANDS OF DOLLARS			
	ELECTRIC DIVISION	GAS DIVISION	WATER DIVISION	TOTAL
DEBT EXPENSE				
Interest Expense - Long-Term Debt				
Interest on Ltd - Series 2014	1,282	-	416	1,698
Interest on Ltd - Series 2016	1,497	1,497	770	3,764
Interest on Ltd - Series 2017	3,446	1,597	837	5,880
Interest on Ltd - Series 2020	6,306	2,477	2,586	11,369
Total Interest Expense - Long-Term Debt	12,531	5,571	4,609	22,711
Amortization of Debt Discount & Expense				
Amortization of Debt Disc & Exp - Series 2014	(574)	-	(47)	(621)
Amortization of Debt Disc & Exp - Series 2016	(534)	(579)	(157)	(1,270)
Amortization of Debt Disc & Exp - Series 2017	(824)	(465)	(178)	(1,467)
Amortization of Debt Disc & Exp - Series 2020	(1,457)	(640)	(667)	(2,764)
Total Amortization of Debt Discount & Expense	(3,389)	(1,684)	(1,049)	(6,122)
TOTAL DEBT EXPENSE	9,142	3,887	3,560	16,589
NET INCOME AFTER DEBT EXPENSE	5,954	(8,008)	14,067	12,013
Contributions in Aid of Construction	28,199	5,005	3,054	36,258
CHANGE IN NET POSITION	34,153	(3,003)	17,121	48,271

MEMPHIS LIGHT, GAS AND WATER DIVISION
CAPITAL EXPENDITURES
FOR CALENDAR YEAR OF 2022

ALL DIVISIONS

PAGE 3

DESCRIPTION	THOUSANDS OF DOLLARS				REF. NO.
	ELECTRIC DIVISION	GAS DIVISION	WATER DIVISION	TOTAL	
TOTAL 2022 CAPITAL EXPENDITURES					3-1
	155,782	39,759	34,355	229,896	

ELECTRIC DIVISION



MEMPHIS LIGHT, GAS AND WATER DIVISION
INCOME, EXPENSE, AND CHANGES IN NET POSITION COMPARISON
2020 THROUGH 2022

ELECTRIC DIVISION

PAGE 4

DESCRIPTION	THOUSANDS OF DOLLARS			REF. NO.
	2020 ACTUAL	2021 BUDGET	2022 BUDGET	
OPERATING REVENUE				
Sales Revenue	1,178,547	1,292,288	1,326,016	4-1
Revenue Adjustment for Uncollectibles	(3,730)	(4,321)	(4,366)	4-2
Non-Sales Revenue	19,452	27,770	27,945	4-3
OPERATING REVENUE	1,194,269	1,315,737	1,349,595	
OPERATING EXPENSE				
Purchased Power	939,781	988,222	1,007,980	4-4
Transmission Expense	7,007	8,080	7,716	4-5
Distribution Expense	37,127	43,477	43,791	4-6
Customer Accounts Expense	14,720	16,832	17,067	4-7
Customer Service & Information Expense	1,651	1,951	2,183	4-8
Sales Expense	1,690	2,061	2,189	4-9
Administrative & General Expense	79,007	86,957	90,323	4-10
OPERATING EXPENSE	1,080,983	1,147,580	1,171,249	
MAINTENANCE EXPENSE				
Transmission Expense	2,890	4,122	6,135	4-11
Distribution Expense	35,680	55,855	55,796	4-12
Administrative & General Expense	2,939	4,847	4,946	4-13
MAINTENANCE EXPENSE	41,509	64,824	66,877	
OTHER OPERATING EXPENSE				
Depreciation Expense	55,661	57,921	58,967	4-14
Payment in Lieu of Taxes	45,156	51,136	46,372	4-15
F.I.C.A. Taxes	1,690	1,722	1,706	4-16
Amortization of Legacy Meters	1,084	1,303	1,192	4-17
Amortization of Software	1,252	1,537	1,537	4-18
OTHER OPERATING EXPENSE	104,842	113,619	109,774	
TOTAL OPERATING EXPENSE	1,227,334	1,326,023	1,347,900	
INCOME				
Operating Income	(33,064)	(10,286)	1,695	4-19
Other Income	41,251	43,234	41,600	4-20
Reduction of Plant Cost Recovered through CIAC	(17,502)	(18,118)	(28,199)	4-21
NET INCOME BEFORE DEBT EXPENSE	(9,315)	14,830	15,096	
DEBT EXPENSE				
Interest Expense - Existing Long-Term Debt	9,269	12,765	12,531	4-22
Amortization of Debt Discount & Expense	(2,382)	(3,710)	(3,389)	4-23
TOTAL DEBT EXPENSE	6,887	9,055	9,142	
NET INCOME AFTER DEBT EXPENSE	(16,202)	5,775	5,954	
Contributions in Aid of Construction	17,502	18,118	28,199	4-24
CHANGE IN NET POSITION*	1,300	23,893	34,153	
* Excludes Pension Non-Cash and Other Post Employment Benefits Non-Cash				

MEMPHIS LIGHT, GAS AND WATER DIVISION
INCOME, EXPENSE, AND CHANGES IN NET POSITION COMPARISON
2021 THROUGH 2022

ELECTRIC DIVISION

PAGE 4a

DESCRIPTION	THOUSANDS OF DOLLARS		
	2021 BUDGET	2022 BUDGET	DIFFERENCE
<u>OPERATING REVENUE</u>			
Sales Revenue	1,292,288	1,326,016	33,728
Revenue Adjustment for Uncollectibles	(4,321)	(4,366)	(45)
Non-Sales Revenue			
Forfeited Discounts	11,822	10,585	(1,237)
Miscellaneous Service Revenue	9,000	9,856	856
Other Operating Revenue	1,428	1,596	168
Rent from Gas/Water Property	5,520	5,908	388
Total Non-Sales Revenue	27,770	27,945	175
OPERATING REVENUE	1,315,737	1,349,595	33,858
<u>OPERATING EXPENSE</u>			
Purchased Power	988,222	1,007,980	19,758
Transmission Expense			
Load Dispatching	1,119	665	(454)
Miscellaneous Transmission Expenses	1,435	1,446	11
Operation Supervision and Engineering	5,132	5,203	71
Station Expenses	394	402	8
Total Transmission Expense	8,080	7,716	(364)
Distribution Expense			
Distribution Load Dispatching Expense	1,119	1,634	515
Meter Expenses	987	812	(175)
Miscellaneous Distribution Expenses ⁽¹⁾	23,103	24,196	1,093
Operation Supervision and Engineering	3,911	4,156	245
Overhead Distribution Line Expense	5,295	5,289	(6)
Services on Customers' Premises	4,979	5,132	153
Station Expenses	1,501	1,544	43
Street Lighting and Signal System Expenses	722	493	(229)
Underground Distribution Line Expenses	1,860	535	(1,325)
Total Distribution Expense	43,477	43,791	314
Customer Accounts Expense			
Customer Order, Records and Collection Expenses	15,672	16,020	348
Meter Reading Expenses	1,009	908	(101)
Supervision-Customer Accounting and Collection	151	139	(12)
Total Customer Accounts Expense	16,832	17,067	235
Customer Service & Information Expense			
Customer Assistance Expenses	995	1,178	183
Informational and Instructional Advertising Expenses	174	163	(11)
Miscellaneous Customer Service & Informational Expense	483	485	2
Supervision-Customer Service and Information	299	357	58
Total Customer Service & Information Expense	1,951	2,183	232
Sales Expense			
Miscellaneous Sales Expenses	2,061	2,189	128
Total Sales Expense	2,061	2,189	128

⁽¹⁾ Includes, but not limited to, the following items: Accrued vacation, absences such as holiday and sick leave, lost time due to bad weather, stand-by pay, and contract services.

ELECTRIC DIVISION

DESCRIPTION	THOUSANDS OF DOLLARS		
	2021 BUDGET	2022 BUDGET	DIFFERENCE
<u>OPERATING EXPENSE (Continued)</u>			
Administrative & General Expense			
Administrative and General Salaries	17,173	18,703	1,530
Administration Expenses Transferred to Capital	(6,680)	(7,255)	(575)
Pension Expense	13,301	11,518	(1,783)
Other Active & Retiree Benefits	22,391	21,815	(576)
Other Post Employment Benefits Funding	2,487	2,423	(64)
Injuries and Damages	2,780	3,031	251
Miscellaneous General Expenses ⁽²⁾	9,833	11,147	1,314
Office Supplies and Expenses	5,628	5,614	(14)
Outside Services Employed	14,292	15,456	1,164
Property Insurance	1,614	1,856	242
Rents-Miscellaneous	4,138	6,015	1,877
Total Administrative & General Expense	86,957	90,323	3,366
OPERATING EXPENSE	1,147,580	1,171,249	23,669
<u>MAINTENANCE EXPENSE</u>			
Transmission Expense			
Maintenance of Overhead Transmission Lines	1	1	-
Maintenance of Station Equipment	1,320	1,431	111
Maintenance of Underground Transmission Lines	697	699	2
Maintenance of Structures and Improvements	73	124	51
Maintenance Supervision and Engineering	2,031	3,880	1,849
Total Transmission Expense	4,122	6,135	2,013
Distribution Expense			
Maintenance of Line Transformers	2,133	1,866	(267)
Maintenance of Meters	2,009	2,050	41
Maintenance of Miscellaneous Distribution Plant	639	539	(100)
Maintenance of Overhead Distribution Lines	32,495	29,632	(2,863)
Maintenance of Station Equipment	1,096	2,082	986
Maintenance of Street Lighting and Signal System	5,725	4,470	(1,255)
Maintenance of Underground Distribution Lines	8,761	12,087	3,326
Maintenance Supervision and Engineering	2,997	3,070	73
Total Distribution Expense	55,855	55,796	(59)
Administrative & General Expense			
Maintenance of General Plant	4,521	4,691	170
Facilities Maintenance Expense	326	255	(71)
Total Administrative & General Expense	4,847	4,946	99
MAINTENANCE EXPENSE	64,824	66,877	2,053

⁽²⁾ Includes, but not limited to, the following items: Mail distribution, property appraisals, security and janitorial services, and fuel use by MLGW.

(2) Includes, but not limited to, the following items: Mail distribution, property appraisals, security and janitorial services, and fuel use by MLGW.

MEMPHIS LIGHT, GAS AND WATER DIVISION
INCOME, EXPENSE, AND CHANGES IN NET POSITION COMPARISON
2021 THROUGH 2022

ELECTRIC DIVISION

PAGE 4c

DESCRIPTION	THOUSANDS OF DOLLARS		
	2021 BUDGET	2022 BUDGET	DIFFERENCE
<u>OTHER OPERATING EXPENSE</u>			
Depreciation Expense	57,921	58,967	1,046
Payment in Lieu of Taxes	51,136	46,372	(4,764)
F.I.C.A. Taxes	1,722	1,706	(16)
Amortization of Legacy Meters	1,303	1,192	(111)
Amortization of Software	1,537	1,537	-
OTHER OPERATING EXPENSE	113,619	109,774	(3,845)
TOTAL OPERATING EXPENSE	1,326,023	1,347,900	21,877
<u>INCOME</u>			
Operating Income	(10,286)	1,695	11,981
Other Income			
Revenues from Sinking & Other Funds - Interest Income	5,000	3,500	(1,500)
Medicare Part D Refund	313	294	(19)
Non-Operating Income - TVA Transmission Credit	36,000	36,000	-
Miscellaneous Non-Operating Income	1,921	1,806	(115)
Total Other Income	43,234	41,600	(1,634)
Reduction of Plant Cost Recovered through CIAC	(18,118)	(28,199)	(10,081)
NET INCOME BEFORE DEBT EXPENSE	14,830	15,096	266
<u>DEBT EXPENSE</u>			
Interest Expense - Long-Term Debt			
Interest on Ltd - Series 2014	1,389	1,282	(107)
Interest on Ltd - Series 2016	1,565	1,497	(68)
Interest on Ltd - Series 2017	3,433	3,446	13
Interest on Ltd - Series 2020	6,378	6,306	(72)
Total Interest Expense - Long-Term Debt	12,765	12,531	(162)
Amortization of Debt Discount & Expense			
Amortization of Debt Disc & Exp - Series 2014	(645)	(574)	71
Amortization of Debt Disc & Exp - Series 2016	(618)	(534)	84
Amortization of Debt Disc & Exp - Series 2017	(966)	(824)	142
Amortization of Debt Disc & Exp - Series 2020	(1,481)	(1,457)	24
Total Amortization of Debt Discount & Expense	(3,710)	(3,389)	321
TOTAL DEBT EXPENSE	9,055	9,142	87
NET INCOME AFTER DEBT EXPENSE	5,775	5,954	179
Contributions in Aid of Construction	18,118	28,199	10,081
CHANGE IN NET POSITION	23,893	34,153	10,260

MEMPHIS LIGHT, GAS AND WATER DIVISION
SOURCE AND APPLICATION OF FUNDS
2022 BUDGET
(THOUSANDS OF DOLLARS)

ELECTRIC DIVISION

PAGE 5

		REF. NO.
<u>SOURCE OF FUNDS:</u>		
FROM OPERATIONS:		
Change in Net Position	34,153	5-1
Non-Cash Charges to Income:		
Depreciation Charged to Operating Income	58,967	5-2
Depreciation Charged to Other Accounts	1,858	5-3
Amortization of Legacy Meters	1,192	5-4
Amortization of Software	1,537	5-5
TOTAL FUNDS FROM OPERATIONS	97,707	
Salvage	1,270	5-6
Financing: Debt Issuance	38,051	5-7
TOTAL FUNDS AVAILABLE	137,028	
<u>APPLICATION OF FUNDS:</u>		
Capital Expenditures	155,782	5-8
Costs of Removal and Other Charges to the Reserve for Depreciation	4,482	5-9
Retirement of Long-Term Debt	10,860	5-10
TOTAL APPLICATION OF FUNDS	171,124	
INCREASE (DECREASE) IN WORKING CAPITAL	(34,096)	

MEMPHIS LIGHT, GAS AND WATER DIVISION
CAPITAL EXPENDITURES COMPARISON
FOR CALENDAR YEAR OF 2022

ELECTRIC DIVISION

PAGE 6

DESCRIPTION	2020 Actual	2021 BUDGET	2022 BUDGET	REF. NO.
SUBSTATION AND TRANSMISSION				
ELEC - SUBSTATION	11,645	12,794	19,781	6-1
ELEC - SUBSTATION TRANSFORMERS REPLACEMENT	3,191	12,034	6,102	6-2
ELEC - SUBSTATION CIRCUIT BREAKERS REPLACEMENT	3,087	3,442	4,124	6-3
ELEC - TRANSMISSION LINES	3,473	2,910	8,190	6-4
CONTRIBUTION IN AID OF CONSTRUCTION - CIAC	-	-	(5,444)	6-5
TOTAL - SUBSTATION AND TRANSMISSION	21,396	31,180	32,753	
DISTRIBUTION SYSTEM				
ELEC - RESIDENTIAL SERVICE IN S/D	150	175	146	6-6
ELEC - RESIDENTIAL SERVICE NOT IN S/D	1,382	1,307	2,090	6-7
ELEC - RESIDENTIAL S/D	79	69	122	6-8
ELEC - APARTMENTS	562	754	1,709	6-9
ELEC - GENERAL POWER SERVICE	6,237	8,614	13,861	6-10
ELEC - GENERAL POWER S/D	182	392	278	6-11
ELEC - MOBILE HOME PARK	-	2	-	6-12
ELEC - TEMPORARY SERVICE	223	621	807	6-13
ELEC - MULTIPLE-UNIT GENERAL POWER	159	72	416	6-14
ELEC - RELOCATE AT CUSTOMER REQUEST	1,899	3,700	6,431	6-15
ELEC - STREET IMPROVEMENTS	382	8,248	14,556	6-16
ELEC - NEW CIRCUITS	1,231	4,475	7,600	6-17
ELEC - VOLTAGE CONVERSION	-	-	20	6-18
ELEC - LINE RECONSTRUCTION/REMOVE IDLE FACILITIES	1,473	3,625	4,250	6-19
ELEC - DEFECT CABLE/FEEDER CABLE REPLACEMENT	1,369	11,800	11,800	6-20
ELEC - DISTRIBUTION POLES	818	3,000	3,000	6-21
ELEC - DISTRIBUTION AUTOMATION	3,300	10,000	31,000	6-22
ELEC - STREET LIGHTS INSTALL	1,976	5,330	11,900	6-23
ELEC - DEMOLITION	32	70	72	6-24
ELEC - STREET LIGHT MAINTENANCE	2,574	2,081	2,122	6-25
ELEC - PLANNED MAINTENANCE	6,725	9,676	9,869	6-26
ELEC - TREE TRIMMING	-	10	10	6-27
ELEC - OPERATIONS MAINTENANCE	114	-	-	6-28
ELEC - LEASED OUTDOOR LIGHTING	688	859	444	6-29
ELEC - STORM RESTORATION	5,879	-	-	6-30
ELEC - SHARED USE CONTRACT	-	500	500	6-31
ELEC - DUCT LINE LEASE	-	75	75	6-32
ELEC - EMERGENCY MAINTENANCE	5,576	5,958	6,076	6-33
JT - RESIDENTIAL SERVICE IN S/D	884	967	707	6-34
JT - RESIDENTIAL SERVICE NOT IN S/D	2	3	20	6-35
JT - RESIDENTIAL S/D	2,807	1,884	1,946	6-36
JT - APARTMENTS	87	53	-	6-37
PCI - CAPACITOR BANKS	-	250	250	6-38
PCI - DIST TRANSFORMERS	5,465	6,155	6,278	6-39
ELEC - METERS	1,246	2,118	2,366	6-40
CONTRIBUTION IN AID OF CONSTRUCTION - CIAC	(15,842)	(18,118)	(28,199)	6-41
TOTAL - DISTRIBUTION SYSTEM	37,659	74,725	112,522	
GENERAL PLANT				
ELEC - BUILDINGS & STRUCTURES	180	1,065	5,006	6-42
ELEC - SECURITY AUTOMATION	1,626	4,349	2,958	6-43
ELEC - LAND PURCHASE	-	1,200	1,200	6-44
ELEC - FLEET CAPITAL POWER OPERATED EQUIPMENT	(50)	2,916	3,666	6-45
ELEC - TRANSPORTATION EQUIPMENT	913	2,939	4,737	6-46
ELEC - TOOLS & EQUIPMENT	34	-	-	6-47
ELEC - LAB & TEST	206	217	862	6-48
ELEC - COMMUNICATION EQUIPMENT	22	95	91	6-49
ELEC - COMMUNICATION TOWERS	-	14,003	8,118	6-50
ELEC - TELECOMMUNICATION NETWORK	2,049	2,834	4,478	6-51
ELEC - UTILITY MONITORING	1,201	908	1,120	6-52
ELEC - CIS DEVELOPMENT	1,228	-	7,675	6-53
ELEC - BUSINESS CONTINUITY	654	1,989	555	6-54
ELEC - DATA PROCESSING EQUIPMENT	-	7,127	5,433	6-55
ELEC - IS/IT PROJECTS	983	4,480	-	6-56
ELEC - CONTINGENCY FUND	-	200	200	6-57
TOTAL - GENERAL PLANT	9,046	44,322	46,099	
TOTAL - ELECTRIC DIVISION CATEGORIES	68,101	150,227	191,374	
Delayed Cost Allocations	1,370	(30,046)	(35,592)	6-58
TOTAL - ELECTRIC DIVISION	69,471	120,181	155,782	

MEMPHIS LIGHT, GAS AND WATER DIVISION SELECT CAPITAL EXPENDITURE BUDGETS FOR CALENDAR YEAR OF 2022		
ELECTRIC DIVISION	PAGE 7	
DESCRIPTION	IN BUDGET YEAR	REF. NO.
<u>SUBSTATION & TRANSMISSION MAJOR PROJECTS</u>		
<u>SUBSTATION</u>		
Install Substation 83 161/23kV Facilities	5,000,000	7-1
FedEx Substation	3,000,000	7-2
Replace RTU's various locations	2,650,919	7-3
TVA CC Plant/Allen Substation 69 Improvements	2,233,333	7-4
Replace relays various locations	1,000,000	7-5
AC Service for Breaker Storage Yard @ Substation 33	694,658	7-6
Replace capacitor banks various locations	600,000	7-7
Install SATEC Metering at Various Substations (Distribution Automation)	575,000	7-8
Refurbish Station Service, Transformer Storage AC, Power & Lighting Substation	419,306	7-9
Replace batteries various locations	390,000	7-10
Seismic Retrofit of Substation 8 Transformer Foundation & Oil Spill Containment	326,618	7-11
Refurbish Station Service & AC Panelboards @ Substation 34	315,043	7-12
Replace Reactor Substation 1	233,010	7-13
Implement Breaker Fail Scheme @ Substation 34	200,000	7-14
Replace 161 kV Potential Transformer @ Substation 32	193,310	7-15
Substation 4 OH/UG Conversion Ckts 2395 & 2397 (City of Memphis)	188,723	7-16
Replace 161kV CVT @ Substation 42	178,508	7-17
Install Transmission Metering Equipment for Transmission Planning Monitoring	150,000	7-18
Install TRV Capacitors	120,000	7-19
Contingency Replace Switches	100,000	7-20
Install JPAX Nodes to Upgrade JMUX SONET Nodes	75,000	7-21
Other Miscellaneous Replace/Install	50,000	7-22
Seismic Retrofit of Non-Structural Substation Components	50,000	7-23
Install Substation 89 161/23kV transformer	38,320	7-24
TOTAL SUBSTATION IMPROVEMENTS	18,781,748	
<u>SUBSTATION - NERC COMPLIANCE</u>		
Install/Upgrade Digital Fault Recorders	1,000,000	7-25
TOTAL NERC COMPLIANCE	1,000,000	
<u>SUBSTATION TRANSFORMERS</u>		
Replace 23/12 kV transformer banks 5335 & 5337 @ Substation 5	4,602,399	7-26
Replace 115/12 kV transformer banks 6555, 6557 & 6559 @ Substation 6	1,500,000	7-27
TOTAL SUBSTATION TRANSFORMERS	6,102,399	
<u>SUBSTATION CIRCUIT BREAKERS</u>		
Contingency Replace Breakers	500,000	7-28
Replace 23 kV Breaker 7307 @ Substation 7	267,115	7-29
Replace 23 kV Breaker 45349 @ Substation 45	200,444	7-30
Replace 23 kV Breaker 4301 @ Substation 4	301,045	7-31
Replace 23 kV Breaker 1837 @ Substation 11	460,786	7-32
Replace 23 kV Breaker 1835 @ Substation 11	210,786	7-33
Replace 12 kV Breaker 7613 @ Substation 27	364,006	7-34
Replace 12 kV Breaker 6609 @ Substation 26	466,225	7-35
Replace 12 kV Breaker 6259 @ Substation 6	284,795	7-36
Replace 12 kV Breaker 6257 @ Substation 6	284,795	7-37
Replace 12 kV Breaker 38257 @ Substation 38	251,393	7-38
Replace 12 kV Breaker 3757 @ Substation 13	251,393	7-39
Replace 115 kV Breaker 5153 @ Substation 25	280,808	7-40
TOTAL SUBSTATION CIRCUIT BREAKERS	4,123,591	
TOTAL SUBSTATION	30,007,738	

MEMPHIS LIGHT, GAS AND WATER DIVISION SELECT CAPITAL EXPENDITURE BUDGETS FOR CALENDAR YEAR OF 2022		
ELECTRIC DIVISION	PAGE 8	
DESCRIPTION	IN BUDGET YEAR	REF. NO.
<u>SUBSTATION/TRANSMISSION PROJECTS</u>		
Structure #1613 Bank Stabilization (USACE Section 14 Funding)	1,000,000	8-1
Misc. projects (OPGW, structure replacements, etc.)	1,000,000	8-2
Sub 83 Cut-in	500,000	8-3
OPGW 42-23	210,000	8-4
OPGW 11-35	200,000	8-5
LIDAR Survey Impacts (NERC)	50,000	8-6
TOTAL SUBSTATION/TRANSMISSION PROJECTS	2,960,000	
<u>TRANSMISSION - REIMBURSABLE</u>		
FedEx Station Transmission	4,000,000	8-7
TVA CC Plant - Transmission Improvements	1,000,000	8-8
TVA CC Plant - Horn Lake Line Transmission Improvements	155,000	8-9
TDOT Lamar & Shelby Drive	75,000	8-10
TOTAL TRANSMISSION REIMBURSABLE	5,230,000	
TOTAL TRANSMISSION LINES	8,190,000	8-11
CONTRIBUTION IN AID OF CONSTRUCTION - CIAC	(5,444,294)	8-12
TOTAL - SUBSTATION AND TRANSMISSION	32,753,444	
<u>DISTRIBUTION SYS. - MAJOR PROJECTS</u>		
Sub 83 Ckt Ties	2,000,000	8-13
Sub 84 Ckt Ties	1,500,000	8-14
New Ckt Sub 84 North	1,500,000	8-15
Substation 83	1,000,000	8-16
Other 2020-24 Projects	1,000,000	8-17
Schilling Farms Circuit Tie(s)	400,000	8-18
Sub. 84, Germantown Rd. Steel Pole Line	200,000	8-19
TOTAL MAJOR NEW CIRCUIT PROJECTS	7,600,000	
<u>MISC. PROJECTS - REIMBURSABLE</u>		
Pinch District Improvements	4,000,000	8-20
Other Relocate at Customer Request Projects	2,430,747	8-21
TOTAL MISC. PROJECTS - REIMBURSABLE	6,430,747	
<u>STREET IMPROVEMENT PROJECTS</u>		
SR-4/US-78/Lamar, south of SR-175/Shelby Dr. to Raines/Perkins Interchange Phase 2	4,721,015	8-21
Elvis Presley Blvd. North and Middle Section	2,325,000	8-22
SP 97/09 TDOT Summary Avenue	2,179,574	8-23
Other Projections 2022-2025	1,300,000	8-24
I-240 at Airways Blvd.	800,000	8-25
SR-1/US-70/Summer Ave, from Macon Rd To Elmore Rd	750,000	8-26
Holmes Road, Malone to US-78/Lamar (CP 04/38)	750,000	8-27
Germantown Rd at Wolf River Blvd (GT 16/01)	700,000	8-28
LL 09/02 - New Canada Rd (Re-Alignment N of I-40 to US-70)	400,000	8-29
SR-14/Third Street bridge over Nonconnah Creek (SP 13/01)	200,000	8-30
Sandbrook/Springbrook/Stonebrook/Coughlin	125,000	8-31
SC 15/01: Walnut Grove, Houston Levee to Rocky Point	100,000	8-32
Mudville Road Bridge, over Big Creek Proj.# 100111	100,000	8-33
Airways @ Ketchum (SP 11/07)	75,000	8-34
New Allen @ Ridgemont - Round-about	15,000	8-35
Charles Bartlett Road - Culvert Replacement	15,000	8-36
TOTAL MAJOR STREET IMPROVEMENT PROJECTS	14,555,589	
TOTAL DISTRIBUTION SYS. - MAJOR PROJECTS	28,586,336	

MEMPHIS LIGHT, GAS AND WATER DIVISION
SELECT CAPITAL EXPENDITURE BUDGETS
FOR CALENDAR YEAR OF 2022

ELECTRIC DIVISION

PAGE 9

DESCRIPTION	IN BUDGET YEAR	REF. NO.
<u>GENERAL PLANT</u>		
<u>PURCHASE OF LAND</u>	1,200,000	9-1
<u>BUILDINGS & STRUCTURES</u>		
<u>SUBSTATIONS</u>		
Replace Roofs - Various Substations	403,300	9-2
<u>ELECTRIC & SYSTEMS OPERATIONS</u>		
UPS Battery Replacement	54,000	9-3
New Storeroom Building	300,000	9-4
ESO - Drainage and pavement upgrade (Front of Bldg.)	298,800	9-5
<u>NETTERS BUSINESS OPERATIONS CENTER</u>		
Replace Five Liebert CRAC Units	450,000	9-6
<u>NEW BUILDINGS</u>		
Building Upgrades	3,500,000	9-7
TOTAL BUILDINGS & STRUCTURES	5,006,100	
<u>ELEC - SECURITY AUTOMATION</u>	2,957,832	9-8
<u>ELEC - FLEET CAPITAL POWER OPERATED EQUIPMENT</u>	3,665,574	9-9
<u>ELEC - TRANSPORTATION EQUIPMENT</u>	4,737,164	9-10
<u>ELEC - COMMUNICATION EQUIPMENT</u>	91,152	9-11
<u>LAB & TEST</u>	862,360	9-12
<u>COMMUNICATION TOWERS</u>		
Microwave/Mobile Radio	8,117,513	9-13
TOTAL COMMUNICATION TOWERS	8,117,513	
<u>TELECOMMUNICATION NETWORK</u>		
DA Network Improvements	2,655,000	9-14
Fiber optic multiplexers	686,000	9-15
Fiber optic cable and equipment	432,000	9-16
Smart Meter/SCADA Network Improvements	400,000	9-17
Telecommunication Systems Growth	216,000	9-18
TDOT Summer Avenue Project	73,800	9-19
Voice Network	15,000	9-20
TOTAL TELECOMMUNICATIONS NETWORK	4,477,800	
<u>UTILITY MONITORING & CONTROL SYSTEMS</u>		
Systems Backup Control & Communication Plan (CO)	1,119,750	9-21
TOTAL UTILITY MONITORING & CONTROL SYS.	1,119,750	

MEMPHIS LIGHT, GAS AND WATER DIVISION
SELECT CAPITAL EXPENDITURE BUDGETS
FOR CALENDAR YEAR OF 2022

ELECTRIC DIVISION

PAGE 10

DESCRIPTION	IN BUDGET YEAR	REF. NO.
<u>GENERAL PLANT (Continued)</u>		
<u>CUSTOMER INFO SYSTEM (CIS) DEVELOPMENT</u>		
Server Blade Chassis and Server Blade Replacement	2,304,096	10-1
IVR and Call Center Expansion Project	475,000	10-2
BillGen Replacement	1,000,000	10-3
3G Meter Volume Corrector Communications Upgrade	800,000	10-4
Mobile Dispatching System Replacement (C/O)	750,000	10-5
CIS Production Hardware & Software Upgrade (C/O)	685,000	10-6
Corporate Virtual Desktop Storage Replacement	600,000	10-7
Electric Meter Test Board Replacement (C/O)	400,000	10-8
2FA Security Systems	250,000	10-9
IVR Replacement (C/O)	221,327	10-10
Meter Data Management System (C/O)	190,000	10-11
TOTAL CUSTOMER INFO. SYS. DEVELOPMENT	7,675,423	
<u>BUSINESS CONTINUITY</u>		
2021 Virtual Backup System ((C/O))	555,000	10-12
TOTAL BUSINESS CONTINUITY	555,000	
<u>PURCHASE OF DATA PROCESSING EQUIPMENT</u>		
Annual Network Upgrade - (C/O)	1,200,164	10-13
AI Project ((C/O))	915,000	10-14
Annual New\Replacement Servers New	625,000	10-15
Annual Network Upgrades- New	600,000	10-16
Network Access Control for End Points (C/O)	571,000	10-17
Project Portfolio Management Software (C/O)	425,000	10-18
2020 Storage Upgrade- (C/O)	424,571	10-19
Work Center Wireless (outdoor) - (C/O)	400,000	10-20
EBS Succession Plan (C/O)	250,000	10-21
PC Equipment	23,004	10-22
TOTAL PURCHASE OF DATA PROCESSING EQUIPMENT	5,433,739	
<u>CONTINGENCY FUNDS - GENERAL PLANT</u>	200,000	10-23
TOTAL GENERAL PLANT	46,099,408	

MEMPHIS LIGHT, GAS AND WATER DIVISION
CAPITAL CARRYOVER SUMMARY*
FOR CALENDAR YEAR OF 2022

ELECTRIC DIVISION

PAGE 11

<u>CAPITAL CARRYOVER CATEGORY</u>	<u>CARRYOVER AMOUNT</u>
Substations, Transmission & Distribution System	17,248,187
Telecommunication Network & Communication Towers	8,734,513
Purchase of Data Processing Equipment	4,185,735
Power Operated and Transportation Equipment	2,885,510
CIS Info Systems Development	2,806,327
Property	850,000
Utility Monitoring	684,750
Buildings & Structures	625,300
Lab & Test Equipment	556,720
BUSINESS CONTINUITY	555,000
Security Automation	309,881
TOTAL CAPITAL CARRYOVER SUMMARY	39,441,923

*Carryover items constitute the funding necessary for capital projects or purchases not completed during the prior budget year. This would include projects which may have been delayed, large projects requiring multiple years to complete, or commodities ordered but not received. These items are part of the total 2022 Budget.

GAS DIVISION



MEMPHIS LIGHT, GAS AND WATER DIVISION
INCOME, EXPENSE, AND CHANGES IN NET POSITION COMPARISON
2020 THROUGH 2022

GAS DIVISION

PAGE 12

DESCRIPTION	THOUSANDS OF DOLLARS			REF. NO.
	2020 ACTUAL	2021 BUDGET	2022 BUDGET	
OPERATING REVENUE				
Sales Revenue	184,840	221,914	237,254	12-1
Revenue Adjustment for Uncollectibles	(535)	(999)	(1,012)	12-2
Non-Sales Revenue	28,435	25,487	26,817	12-3
OPERATING REVENUE	212,741	246,402	263,059	
OPERATING EXPENSE				
Production - LNG Plant	1,272	1,342	1,430	12-4
Purchased Gas	74,003	110,117	120,035	12-5
Compressed Natural Gas (CNG)	29	12	12	12-6
Liquefied Natural Gas (LNG)	1,151	1,116	1,056	12-7
Distribution Expense	24,599	27,702	28,918	12-8
Customer Accounts Expense	10,120	11,574	11,553	12-9
Customer Service & Information Expense	1,526	1,654	1,845	12-10
Sales Expense	390	413	418	12-11
Administrative & General Expense	38,884	41,840	43,137	12-12
OPERATING EXPENSE	151,975	195,770	208,404	
MAINTENANCE EXPENSE				
Production Expense	387	411	387	12-13
Distribution Expense	7,110	7,636	7,848	12-14
Administrative & General Expense	144	1,480	1,586	12-15
MAINTENANCE EXPENSE	7,641	9,527	9,821	
OTHER OPERATING EXPENSE				
Depreciation Expense	17,559	18,273	18,642	12-16
Payment in Lieu of Taxes	19,461	22,780	20,338	12-17
F.I.C.A. Taxes	648	658	652	12-18
Amortization of Leasehold Improvements	-	-	-	12-19
Amortization of Legacy Meters	1,317	1,483	1,423	12-20
Amortization of Software	3,812	3,939	3,940	12-21
OTHER OPERATING EXPENSE	42,797	47,133	44,995	
TOTAL OPERATING EXPENSE	202,414	252,430	263,220	
INCOME				
Operating Income	10,327	(6,028)	(161)	12-22
Other Income	391	1,028	1,045	12-23
Reduction of Plant Cost Recovered through CIAC	(2,470)	(3,954)	(5,005)	12-24
NET INCOME BEFORE DEBT EXPENSE	8,247	(8,954)	(4,121)	
DEBT EXPENSE				
Interest Expense - Long-Term Debt	4,046	5,750	5,571	12-25
Amortization of Debt Discount & Expense	(1,266)	(1,683)	(1,684)	12-26
TOTAL DEBT EXPENSE	2,780	4,067	3,887	
NET INCOME AFTER DEBT EXPENSE	5,467	(13,021)	(8,008)	
Contributions in Aid of Construction	2,470	3,954	5,005	12-27
CHANGE IN NET POSITION*	7,938	(9,067)	(3,003)	
* Excludes Pension Non-Cash and Other Post Employment Benefits Non-Cash				

MEMPHIS LIGHT, GAS AND WATER DIVISION
INCOME, EXPENSE, AND CHANGES IN NET POSITION COMPARISON
2021 THROUGH 2022

GAS DIVISION

PAGE 12a

DESCRIPTION	THOUSANDS OF DOLLARS		
	2021 BUDGET	2022 BUDGET	DIFFERENCE
OPERATING REVENUE			
Sales Revenue	221,914	237,254	15,340
Revenue Adjustment for Uncollectibles	(999)	(1,012)	(13)
Non-Sales Revenue			
Forfeited Discounts	3,107	2,800	(307)
Miscellaneous Service Revenue	2,304	2,016	(288)
Other Operating Revenue	552	612	60
Compressed Natural Gas (CNG)	24	36	12
Liquefied Natural Gas (LNG)	2,628	2,568	(60)
Rent from Electric/Water Property	6,000	8,387	2,387
Transported Gas	10,872	10,398	(474)
Total Non-Sales Revenue	25,487	26,817	1,330
OPERATING REVENUE	246,402	263,059	16,657
OPERATING EXPENSE			
Purchased Gas	110,117	120,035	9,918
Compressed Natural Gas (CNG)	12	12	-
Liquified Natural Gas (LNG)	1,116	1,056	(60)
Production Expense			
Operation Labor and Expenses	1,202	1,287	85
Operation Supervision and Engineering	140	143	3
Total Production Expense	1,342	1,430	88
Distribution Expense			
Customer Installation Expenses	5,068	5,215	147
Distribution Load Dispatching Expense	763	790	27
Mains and Services	4,950	3,985	(965)
Measuring and Regulating Expenses	79	79	-
Meter and House Regulator Expenses	3,422	3,493	71
Miscellaneous Distribution Expenses ⁽¹⁾	9,828	11,615	1,787
Rents	16	5	(11)
Operation Supervision and Engineering	3,576	3,736	160
Total Distribution Expense	27,702	28,918	1,216
Customer Accounts Expense			
Customer Order, Records and Collection Expenses	9,985	10,111	126
Meter Reading Expenses	1,457	1,314	(143)
Supervision-Customer Accounting and Collection	132	128	(4)
Total Customer Accounts Expense	11,574	11,553	(21)
Customer Service & Information Expense			
Customer Assistance Expenses	670	811	141
Informational and Instructional Advertising Expenses	58	54	(4)
Miscellaneous Customer Service & Informational Expenses	675	686	11
Supervision-Customer Service and Information	251	294	43
Total Customer Service & Information Expense	1,654	1,845	191
Demonstrating and Selling Expenses	-	-	-
Miscellaneous Sales Expenses	413	418	5
Total Sales Expense	413	418	5

⁽¹⁾ Includes, but not limited to, the following items: Accrued vacation, absences such as holiday and sick leave, lost time due to bad weather, stand-by pay, and contract services.

MEMPHIS LIGHT, GAS AND WATER DIVISION
INCOME, EXPENSE, AND CHANGES IN NET POSITION COMPARISON
2021 THROUGH 2022

GAS DIVISION

PAGE 12b

DESCRIPTION	THOUSANDS OF DOLLARS		
	2021 BUDGET	2022 BUDGET	DIFFERENCE
<u>OPERATING EXPENSE (Continued)</u>			
Administrative & General Expense			
Administrative and General Salaries	6,950	7,548	598
Administration Expenses Transferred to Capital	(1,298)	(1,314)	(16)
Pension Expense	5,562	4,816	(746)
Other Active & Retiree Benefits	12,293	11,981	(312)
Other Post Employment Benefits Funding	1,040	1,013	(27)
Injuries and Damages	1,769	1,847	78
Miscellaneous General Expenses ⁽²⁾	3,919	4,661	742
Office Supplies and Expenses	2,135	2,328	193
Outside Services Employed	5,471	5,898	427
Property Insurance	826	945	119
Rents-Miscellaneous	3,173	3,414	241
Total Administrative & General Expense	41,840	43,137	1,297
OPERATING EXPENSE	195,770	208,404	12,634
<u>MAINTENANCE EXPENSE</u>			
Production Expense			
Maintenance of Other Equipment	104	90	(14)
Maintenance of Structures and Improvements	85	73	(12)
Maintenance Supervision and Engineering	222	224	2
Total Production Expense	411	387	(24)
Distribution Expense			
Maintenance of Mains	4,623	4,809	186
Maintenance of Meters	296	300	4
Maintenance of Services	1,162	1,146	(16)
Maintenance Supervision and Engineering	85	88	3
Measuring and Regulating Equipment Expenses	1,470	1,505	35
Total Distribution Expense	7,636	7,848	212
Administrative & General Expense			
Maintenance of General Plant	1,322	1,473	151
Facilities Maintenance Expense	158	113	(45)
Total Administrative & General Expense	1,480	1,586	106
MAINTENANCE EXPENSE	9,527	9,821	294
<u>OTHER OPERATING EXPENSE</u>			
Depreciation Expense	18,273	18,642	369
Payment in Lieu of Taxes	22,780	20,338	(2,442)
F.I.C.A. Taxes	658	652	(6)
Amortization of Legacy Meters	1,483	1,423	(60)
Amortization of Software	3,939	3,940	1
OTHER OPERATING EXPENSE	47,133	44,995	(2,138)
TOTAL OPERATING EXPENSE	252,430	263,220	10,790
⁽²⁾ Includes, but not limited to, the following items: Mail distribution, property appraisals, security and janitorial services, and fuel use by MLGW.			

MEMPHIS LIGHT, GAS AND WATER DIVISION
INCOME, EXPENSE, AND CHANGES IN NET POSITION COMPARISON
2021 THROUGH 2022

GAS DIVISION

PAGE 12c

DESCRIPTION	THOUSANDS OF DOLLARS		
	2021 BUDGET	2022 BUDGET	DIFFERENCE
INCOME			
Operating Income	(6,028)	(161)	5,867
Other Income			
Expenses of Merchandising, Jobbing & Contracts	(2,521)	(2,588)	(67)
Revenues from Merchandising, Jobbing & Contracts	1,302	1,304	2
Revenues from Sinking & Other Funds-Interest Income	2,000	2,000	-
Medicare Part D Refund	158	122	(36)
Miscellaneous Non-Operating Income	89	207	118
Total Other Income	1,028	1,045	17
Reduction of Plant Cost Recovered through CIAC	(3,954)	(5,005)	(1,051)
NET INCOME BEFORE DEBT EXPENSE	(8,954)	(4,121)	4,833
DEBT EXPENSE			
Interest Expense - Long-Term Debt			
Interest on Ltd - Series 2016	1,565	1,497	(68)
Interest on Ltd - Series 2017	1,663	1,597	(66)
Interest on Ltd - Series 2020	2,522	2,477	(45)
Total Interest Expense - Long-Term Debt	5,750	5,571	(179)
Amortization of Debt Discount & Expense			
Amortization of Debt Disc & Exp - Series 2016	(561)	(579)	(18)
Amortization of Debt Disc & Exp - Series 2017	(485)	(465)	20
Amortization of Debt Disc & Exp - Series 2020	(637)	(640)	(3)
Total Amortization of Debt Discount & Expense	(1,683)	(1,684)	(1)
TOTAL DEBT EXPENSE	4,067	3,887	(180)
NET INCOME AFTER DEBT EXPENSE	(13,021)	(8,008)	5,013
Contributions in Aid of Construction	3,954	5,005	1,051
CHANGE IN NET POSITION	(9,067)	(3,003)	6,064

MEMPHIS LIGHT, GAS AND WATER DIVISION
SOURCE AND APPLICATION OF FUNDS
2022 BUDGET
(THOUSANDS OF DOLLARS)

GAS DIVISION

PAGE 13

		REF. NO.
<u>SOURCE OF FUNDS:</u>		
FROM OPERATIONS:		
Change in Net Position	(3,003)	13-1
Non-Cash Charges to Income:		
Depreciation Charged to Operating Income	18,642	13-2
Depreciation Charged to Other Accounts	1,821	13-3
Amortization of Legacy Meters	1,423	13-4
Amortization of Software	3,940	13-5
TOTAL FUNDS FROM OPERATIONS	22,823	
Salvage	310	13-6
Financing: Debt Issuance	38,827	13-7
TOTAL FUNDS AVAILABLE	61,960	
<u>APPLICATION OF FUNDS:</u>		
Capital Expenditures	39,759	13-8
Costs of Removal and Other Charges to the Reserve for Depreciation	178	13-9
Retirement of Long Term Debt	4,140	13-10
TOTAL APPLICATION OF FUNDS	44,077	
INCREASE (DECREASE) IN WORKING CAPITAL	17,883	

**MEMPHIS LIGHT, GAS AND WATER DIVISION
CAPITAL EXPENDITURES COMPARISON
FOR CALENDAR YEAR OF 2022**

GAS DIVISION

PAGE 14

DESCRIPTION	THOUSANDS OF DOLLARS		2022 BUDGET	REF. NO.
	2020 Actual	2021 BUDGET		
PRODUCTION SYSTEM				
GAS - LNG PROCESSING FACILITIES	179	600	200	
GAS - CNG STATIONS	-	-	-	
TOTAL PRODUCTION SYSTEM	179	600	200	14-1
DISTRIBUTION SYSTEM				
GAS - APARTMENTS	24			14-2
GAS - RESIDENTIAL SERVICE IN S/D	-	1	12	14-3
GAS - RESIDENTIAL SERVICE NOT IN S/D	456	722	959	14-4
GAS - RESIDENTIAL S/D	10	9	-	14-5
GAS - LAND PURCHASE	4	375	225	14-6
GAS - GENERAL POWER SERVICE	449	2,842	6,413	14-7
GAS - GENERAL POWER S/D	74	98	254	14-10
GAS - MULTIPLE-UNIT GENERAL POWER	45	32	52	14-9
GAS - RELOCATE AT CUSTOMER REQUEST	291	186	341	14-10
GAS - PURCHASE OF METERS	1,231	3,411	2,745	14-11
GAS - STREET IMPROVEMENTS	953	4,190	5,261	14-12
GAS - NEW GAS MAIN	892	250	250	14-13
GAS - GAS MAIN/SERVICE REPL (D.O.T.)	5,775	5,765	5,535	14-14
GAS - TRANSMISSION PIPELINES AND FACILITIES	1,072	3,300	2,400	14-15
GAS - REGULATOR STATIONS	240	1,100	1,000	14-16
GAS - GATE STATIONS	153	-	1,500	14-20
GAS - PLANNED MAINTENANCE	3,679	4,896	4,994	14-21
JT - RESIDENTIAL SERVICE IN S/D	1	466	413	14-19
JT - RESIDENTIAL SERVICE NOT IN S/D	-	1	16	14-20
JT - RESIDENTIAL S/D	1,032	731	714	14-21
JT - APARTMENTS	5	12	-	14-26
GAS - EMERGENCY MAINTENANCE	621	1,547	1,578	14-23
GAS - DEMOLITION	139			14-24
CONTRIBUTIONS IN AID OF CONSTRUCTION (CIAC)	(1,234)	(3,954)	(5,005)	14-25
TOTAL - DISTRIBUTION SYSTEM	15,912	25,980	29,657	
GENERAL PLANT				
GAS - BUILDINGS & STRUCTURES	815	3,845	6,595	14-26
GAS - SECURITY AUTOMATION	51	960	941	14-27
GAS - FURNITURE & FIXTURES	-	-	238	14-28
GAS - DATA PROCESSING	-	158	-	14-29
GAS - IS/IT PROJECTS	97	-	438	14-30
GAS - FLEET CAPITAL COMMON POWER OPERATED EQUIP	-	1,421	1,380	14-31
GAS - FLEET CAPITAL COMMON TRANSPORTATION EQUIP	485	2,788	4,201	14-32
GAS - FLEET GAS POWER OPERATED EQUIPMENT	2,260	864	1,646	14-33
GAS - FLEET GAS TRANSPORTATION EQUIPMENT	-	4,196	2,478	14-34
GAS - TOOLS & EQUIPMENT	53	36	11	14-35
GAS - COMMON TOOLS & EQUIPMENT	508	32	133	14-36
GAS - MISCELLANEOUS REQUEST-PPE	-	983	-	14-37
GAS - CONTINGENCY FUNDS	-	200	200	14-38
TOTAL - GENERAL PLANT	4,269	15,483	18,261	
TOTAL - GAS DIVISION CATEGORIES	20,360	42,063	48,118	
Delayed Cost Allocations	193	(8,412)	(8,359)	14-39
TOTAL - GAS DIVISION	20,553	33,651	39,759	

**MEMPHIS LIGHT, GAS AND WATER DIVISION
SELECT CAPITAL EXPENDITURE BUDGETS
FOR CALENDAR YEAR OF 2022**

GAS DIVISION

PAGE 15

DESCRIPTION	IN	REF.
	BUDGET YEAR	NO.
<u>PRODUCTION SYSTEM</u>		
Gas - LNG Processing Facilities	200,000	15-1
TOTAL GAS - PRODUCTION SYSTEM	200,000	
<u>DISTRIBUTION SYSTEM - MAJOR PROJECTS</u>		
<u>STREET IMPROVEMENTS</u>		
Holmes Rd, Malone Rd To Lamar Ave	2,400,000	15-2
SP 97/09 TDOT Summary Avenue	809,005	15-3
SP 03/10, SR-4/US-78 from MS State Line to S of Shelby Dr.	418,135	15-4
SC 15/01 Walnut Grove, Rocky Point-Houston Levee	350,000	15-5
LL 09/02 Canada Rd, Re-Alignment, WO288164	300,000	15-6
CP 05/15, Malone Rd, Holmes to Shelby	300,000	15-7
CP 16/16 Elvis Presley Middle Seg, WO288159	145,000	15-8
SP 06/07 I-55 Interchange@ Crump Blvd, W8P77381	140,000	15-9
GT 16/01, Germantown Rd at Brierbrook, W8Q43005	124,000	15-10
SP 08/12 New Allen @ Ridgemont, WO467607	100,000	15-11
CP 18/09 Bethel Grove Sewer Ext	75,000	15-12
CP 20/07 Mysen @ Karstad, WO666987	50,000	15-13
CP 04/39, Pleasant Hill Rd-Holmes to Shelby	50,000	15-14
TOTAL GAS - STREET IMPROVEMENTS	5,261,140	
<u>TRANSMISSION PIPELINES AND FACILITIES</u>		
12" XHP Brooks to McMullen	1,400,000	15-15
18" XXHP Pipeline Replacement @ Covington Pike & LNRR	500,000	15-16
Transmission Work	500,000	15-17
TOTAL TRANSMISSION PIPELINES AND FACILITIES	2,400,000	
TOTAL DISTRIBUTION SYS. - MAJOR PROJECTS	7,661,140	
<u>GENERAL PLANT</u>		
<u>BUILDINGS & STRUCTURES</u>		
<u>SOUTH SERVICE CENTER</u>		
Paving Upgrades	1,183,200	15-18
<u>NORTH SERVICE CENTER</u>		
Building #8 (Re-cover over Stores 160,668 square foot roof)	3,200,000	15-19
Asphalt Paving & Concrete Slabs/ Drives Phase 2	500,000	15-20
Building #8 (Re-cover over office 24,000 square foot roof)	494,000	15-21
Concrete Pad for Transformers	420,000	15-22
Bucket Truck & Testing Pad	60,000	15-23
<u>Hickory Hill Service Center</u>		
Paving Upgrades	595,900	15-24

MEMPHIS LIGHT, GAS AND WATER DIVISION
SELECT CAPITAL EXPENDITURE BUDGETS
FOR CALENDAR YEAR OF 2022

GAS DIVISION

PAGE 16

DESCRIPTION	IN BUDGET YEAR	REF. NO.
<u>GENERAL PLANT (Continued)</u>		
<u>CHOCTAW</u>		
Security Fencing around Choctaw and new property	80,000	16-1
Replace HVAC Roof-Top Units (7)	62,000	16-2
TOTAL BUILDINGS & STRUCTURES	6,595,100	
GAS - SECURITY AUTOMATION	940,730	16-3
GAS - TOOLS & EQUIPMENT	11,340	16-4
GAS - TOOLS & EQUIPMENT COMMON	132,968	16-5
FLEET CAPITAL COMMON POWER OPERATED EQUIP	1,380,107	16-6
FLEET CAPITAL COMMON TRANSPORTATION EQUIP	4,200,853	16-7
FLEET GAS POWER OPERATED EQUIPMENT	1,645,612	16-8
FLEET GAS TRANSPORTATION EQUIPMENT	2,478,165	16-9
<u>IS/IT PROJECTS</u>		
Natural Gas Management System (CO)	158,387	16-10
ETRM Phase 2 Project	280,000	16-11
TOTAL IS/IT PROJECTS	438,387	
<u>Furniture & Fixtures</u>		
Gas - Furniture Fixtures	237,600	16-12
<u>CONTINGENCY FUNDS - GENERAL PLANT</u>	200,000	16-13
TOTAL GENERAL PLANT	18,260,863	

MEMPHIS LIGHT, GAS AND WATER DIVISION
CAPITAL CARRYOVER SUMMARY*
FOR CALENDAR YEAR OF 2022

GAS DIVISION

PAGE 17

<u>CAPITAL CARRYOVER CATEGORY</u>	<u>CARRYOVER AMOUNT</u>
Distribution System	6,532,086
Power Operated and Transportation Equipment	5,584,139
Buildings & Structures	3,513,100
Security Automation	795,223
Data Processing- IS/IT	<u>438,387</u>
TOTAL CAPITAL CARRYOVER SUMMARY	<u>16,862,935</u>

*Carryover items constitute the funding necessary for capital projects or purchases not completed during the prior budget year. This would include projects which may have been delayed, large projects requiring multiple years to complete, or commodities ordered but not received. These items are part of the total 2022 Budget.

WATER DIVISION



MEMPHIS LIGHT, GAS AND WATER DIVISION
INCOME, EXPENSE, AND CHANGES IN NET POSITION COMPARISON
2020 THROUGH 2022

WATER DIVISION

PAGE 18

DESCRIPTION	THOUSANDS OF DOLLARS			REF. NO.
	2020 ACTUAL	2021 BUDGET	2022 BUDGET	
OPERATING REVENUE				
Sales Revenue	106,973	116,477	123,733	18-1
Revenue Adjustment for Uncollectibles	(643)	(902)	(886)	18-2
Non-Sales Revenue	4,324	5,436	5,156	18-3
OPERATING REVENUE	110,654	121,011	128,003	
OPERATING EXPENSE				
Production Expense	13,706	14,583	14,389	18-4
Distribution Expense	12,540	15,908	14,892	18-5
Customer Accounts Expense	6,888	8,128	8,093	18-6
Customer Service & Information Expense	908	988	1,138	18-7
Sales Expense	368	321	315	18-8
Administrative & General Expense	28,495	34,815	36,353	18-9
OPERATING EXPENSE	62,906	74,743	75,180	
MAINTENANCE EXPENSE				
Production Expense	2,209	3,590	3,215	18-10
Distribution Expense	8,158	9,406	9,123	18-11
Administrative & General Expense	3,346	3,631	3,849	18-12
MAINTENANCE EXPENSE	13,713	16,627	16,187	
OTHER OPERATING EXPENSE				
Depreciation Expense	10,984	11,904	11,564	18-13
Payment in Lieu of Taxes	2,500	2,500	4,500	18-14
F.I.C.A. Taxes	479	485	488	18-15
Amortization of Legacy Meters	368	493	452	18-16
OTHER OPERATING EXPENSE	14,331	15,382	17,004	
TOTAL OPERATING EXPENSE	90,950	106,752	108,371	
INCOME				
Operating Income	19,704	14,259	19,632	18-17
Other Income	882	1,055	1,049	18-18
Reduction of Plant Cost Recovered through CIAC	(4,087)	(4,604)	(3,054)	18-19
NET INCOME BEFORE DEBT EXPENSE	16,498	10,710	17,627	
DEBT EXPENSE				
Interest Expense - Existing Long - Term Debt	2,898	4,749	4,609	18-20
Amortization of Debt Discount & Expense	(596)	(1,053)	(1,049)	18-21
TOTAL DEBT EXPENSE	2,302	3,696	3,560	
NET INCOME AFTER DEBT EXPENSE	14,196	7,014	14,067	
Contributions in Aid of Construction	4,087	4,604	3,054	18-22
CHANGE IN NET POSITION*	18,283	11,618	17,121	

* Excludes Pension Non-Cash and Other Post Employment Benefits Non-Cash

MEMPHIS LIGHT, GAS AND WATER DIVISION
INCOME, EXPENSE, AND CHANGES IN NET POSITION COMPARISON
2021 THROUGH 2022

WATER DIVISION

PAGE 18a

DESCRIPTION	THOUSANDS OF DOLLARS		
	2021 BUDGET	2022 BUDGET	DIFFERENCE
OPERATING REVENUE			
Sales Revenue	116,477	123,733	7,256
Revenue Adjustment for Uncollectibles	(902)	(886)	16
Non-Sales Revenue			
Forfeited Discounts	1,524	1,508	(16)
Miscellaneous Service Revenue	1,992	1,668	(324)
Cross Connection Revenue	1,380	1,392	12
Other Operating Revenue	396	444	48
Rent from Electric/Gas Property	144	144	-
Total Non-Sales Revenue	5,436	5,156	(280)
OPERATING REVENUE	121,011	128,003	6,992
OPERATING EXPENSE			
Production Expense			
Chemicals	1,100	950	(150)
Operations Production Water Treatment	55	58	3
Fuel or Power Purchased for Pumping	7,300	7,449	149
Miscellaneous Expense	2,988	2,456	(532)
Operation Labor and Expenses	2,603	2,922	319
Operation Supervision and Engineering	231	237	6
Pumping Labor and Expenses	306	317	11
Total Production Expense	14,583	14,389	(194)
Distribution Expense			
Customer Installation Expenses	3,014	2,796	(218)
Meter Expenses	1,346	1,392	46
Miscellaneous Distribution Expenses ⁽¹⁾	8,921	8,075	(846)
Operation Supervision and Engineering	2,185	2,181	(4)
Storage Facilities	104	103	(1)
Transmission and Distribution Lines	336	343	7
Rents	2	2	-
Total Distribution Expense	15,908	14,892	(1,016)
Customer Accounts Expense			
Customer Order, Records and Collection Expenses	6,943	7,022	79
Meter Reading Expenses	1,056	945	(111)
Supervision-Customer Accounting and Collection	129	126	(3)
Total Customer Accounts Expense	8,128	8,093	(35)
Customer Service & Information Expense			
Customer Assistance Expenses	500	609	109
Informational and Instructional Advertising Expenses	239	247	8
Supervision-Customer Service and Information	249	282	33
Total Customer Service & Information Expense	988	1,138	150
Sales Expense			
Demonstrating and Selling Expenses	-	-	-
Miscellaneous Sales Expenses	321	315	(6)
Sales Expense and Supervision	-	-	-
Total Sales Expense	321	315	(6)
⁽¹⁾ Includes, but not limited to, the following items: Accrued vacation, absences such as holiday and sick leave, lost time due to bad weather, stand-by pay, and contract services.			

WATER DIVISION

DESCRIPTION	THOUSANDS OF DOLLARS		
	2021 BUDGET	2022 BUDGET	DIFFERENCE
<u>OPERATING EXPENSE (Continued)</u>			
Administrative & General Expense			
Administrative and General Salaries	4,825	5,258	433
Administration Expenses Transferred to Capital	(1,621)	(1,532)	89
Pension Expense	4,111	3,560	(551)
Other Active & Retiree Benefits	8,827	8,621	(206)
Other Post Employment Benefits	769	749	(20)
Injuries and Damages	1,513	1,442	(71)
Miscellaneous General Expenses ⁽²⁾	3,654	4,304	650
Office Supplies and Expenses	1,745	1,613	(132)
Outside Services Employed	6,907	7,431	524
Property Insurance	592	671	79
Rents-Miscellaneous	3,493	4,236	743
Total Administrative & General Expense	34,815	36,353	1,538
OPERATING EXPENSE	74,743	75,180	437
<u>MAINTENANCE EXPENSE</u>			
Production Expense			
Maintenance of Pumping Equipment	875	862	(13)
Maintenance of Water Treatment Equipment	1,570	1,288	(282)
Maintenance of Wells	1,036	954	(82)
Maintenance Supervision and Engineering	109	111	2
Total Production Expense	3,590	3,215	(375)
Distribution Expense			
Maintenance of Hydrants	537	604	67
Maintenance of Meters	3,460	3,144	(316)
Maintenance of Miscellaneous Distribution Plant	42	39	(3)
Maintenance of Services	1,447	1,352	(95)
Maintenance of Transmission and Distribution Mains	3,920	3,984	64
Total Distribution Expense	9,406	9,123	(283)
Administrative & General Expense			
Maintenance of General Plant	1,565	1,575	10
Facilities Maintenance Expense	2,066	2,274	208
Total Administrative & General Expense	3,631	3,849	218
MAINTENANCE EXPENSE	16,627	16,187	(440)
<u>OTHER OPERATING EXPENSE</u>			
Depreciation Expense	11,904	11,564	(340)
Payment in Lieu of Taxes	2,500	4,500	2,000
F.I.C.A. Taxes	485	488	3
Amortization of Legacy Meters	493	452	(41)
OTHER OPERATING EXPENSE	15,382	17,004	1,622
TOTAL OPERATING EXPENSE	106,752	108,371	1,619

⁽²⁾ Includes, but not limited to, the following items: Mail distribution, property appraisals, security and janitorial services, and fuel use by MLGW.

MEMPHIS LIGHT, GAS AND WATER DIVISION
INCOME, EXPENSE, AND CHANGES IN NET POSITION COMPARISON
2021 THROUGH 2022

WATER DIVISION

PAGE 18c

DESCRIPTION	THOUSANDS OF DOLLARS		
	2021 BUDGET	2022 BUDGET	DIFFERENCE
<u>INCOME</u>			
Operating Income	14,259	19,632	5,373
Other Income			
Revenues from Sinking & Other Funds-Interest Income	501	500	(1)
Medicare Part D Refund	92	85	(7)
Miscellaneous Non-Operating Income	462	464	2
Total Other Income	1,055	1,049	(6)
Reduction of Plant Cost Recovered through CIAC	(4,604)	(3,054)	1,550
NET INCOME BEFORE DEBT EXPENSE	10,710	17,627	6,917
<u>DEBT EXPENSE</u>			
Interest Expense - Long-Term Debt			
Interest on Ltd - Series 2014	464	416	(48)
Interest on Ltd - Series 2016	793	770	(23)
Interest on Ltd - Series 2017	863	837	(26)
Interest on Ltd - Series 2020	2,629	2,586	(43)
Total Interest Expense - Long-Term Debt	4,749	4,609	(140)
Amortization of Debt Discount & Expense			
Amortization of Debt Disc & Exp - Series 2014	(49)	(47)	2
Amortization of Debt Disc & Exp - Series 2016	(163)	(157)	6
Amortization of Debt Disc & Exp - Series 2017	(183)	(178)	5
Amortization of Debt Disc & Exp - Series 2020	(658)	(667)	(9)
Total Amortization of Debt Discount & Expense	(1,053)	(1,049)	13
TOTAL DEBT EXPENSE	3,696	3,560	(127)
NET INCOME AFTER DEBT EXPENSE	7,014	14,067	7,044
Contributions in Aid of Construction	4,604	3,054	(1,550)
CHANGE IN NET POSITION	11,618	17,121	5,503

MEMPHIS LIGHT, GAS AND WATER DIVISION
SOURCE AND APPLICATION OF FUNDS
2022 BUDGET
(THOUSANDS OF DOLLARS)

WATER DIVISION

PAGE 19

		REF. NO.
<u>SOURCE OF FUNDS:</u>		
FROM OPERATIONS:		
Change in Net Position	17,121	19-1
Non-Cash Charges to Income:		
Depreciation Charged to Operating Income	11,564	19-2
Depreciation Charged to Other Accounts	383	19-3
Amortization of Legacy Meters	452	19-4
TOTAL FUNDS FROM OPERATIONS	29,520	
Salvage	72	19-5
Financing: Debt Issuance	32,283	19-6
TOTAL FUNDS AVAILABLE	61,875	
<u>APPLICATION OF FUNDS:</u>		
Capital Expenditures	34,355	19-7
Costs of Removal and Other Charges to the Reserve for Depreciation	616	19-8
Retirement of Long-Term Debt	6,280	19-9
TOTAL APPLICATION OF FUNDS	41,251	
INCREASE (DECREASE) IN WORKING CAPITAL	20,624	

**MEMPHIS LIGHT, GAS AND WATER DIVISION
CAPITAL EXPENDITURES COMPARISON
FOR CALENDAR YEAR OF 2022**

WATER DIVISION

PAGE 20

DESCRIPTION	2020 Actual	2021 BUDGET	2022 BUDGET	REF. NO.
PRODUCTION SYSTEM				
WATER - PUMPING STATIONS	2,519	7,804	13,093	20-1
WATER - OVERHEAD STORAGE TANKS	102	-	-	20-2
WATER - UNDERGROUND STORAGE RESERVOIRS	343	7,150	1,300	20-3
WATER - PRODUCTION WELLS	2,351	4,868	6,124	20-4
WATER - LAND PURCHASE	-	75	75	20-5
WATER- OPERATIONS MAINTENANCE	721	1,000	1,000	20-6
Contingency Fund - Production System	-	50	50	20-7
SUBTOTAL - PRODUCTION SYSTEM	6,036	20,947	21,642	
WATER - BUILDINGS & STRUCTURES	-	807	1,399	20-8
TOTAL PROD. SYSTEM - BLDGS. & STRUCT.	6,036	21,754	23,041	
DISTRIBUTION SYSTEM				
WATER - RESIDENTIAL SERVICE IN S/D	171	167	249	20-9
WATER - RESIDENTIAL SERVICE NOT IN S/D	462	438	368	20-10
WATER - RESIDENTIAL S/D	317	158	200	20-11
WATER - APARTMENTS	52	17	23	20-12
WATER - GENERAL POWER SERVICE	3,110	5,141	3,333	20-13
WATER - RELOCATE AT CUSTOMER REQUEST	133	1,210	104	20-14
WATER - STREET IMPROVEMENTS	1,036	2,575	4,141	20-15
WATER - NEW WATER MAIN	612	2,339	2,039	20-16
WATER- LEAD SERVICE REPLACEMENT	869	2,500	2,500	20-17
WATER - PURCHASE OF METERS	835	1,637	1,682	20-18
WATER - PLANNED MAINTENANCE	2,901	3,000	3,000	20-19
WATER - EMERGENCY MAINTENANCE	2,505	3,265	3,330	20-20
CONTRIBUTIONS IN AID OF CONSTRUCTION (CIAC)	(3,122)	(4,604)	(3,054)	20-21
TOTAL - DISTRIBUTION SYSTEM	9,881	17,843	17,915	
GENERAL PLANT				
WATER - BUILDINGS & STRUCTURES	25	1,528	-	20-22
WATER - SECURITY AUTOMATION	-	169	164	20-23
WATER - FLEET CAPITAL POWER OPERATED EQUIP	99	24	380	20-24
WATER - FLEET CAPITAL WATER TRANSPORTATION EQUIP	1,368	2,778	1,320	20-25
WATER- IS/IT PROJECTS WATER	-	250	130	20-26
WATER - LAB EQUIPMENT	284	-	-	20-27
WATER -TOOLS AND EQUIPMENT	21	-	-	20-28
WATER - CONTINGENCY FUND	-	200	200	20-29
TOTAL - GENERAL PLANT	1,797	4,949	2,194	
TOTAL - WATER DIVISION CATEGORIES	17,714	44,546	43,150	
Delayed Cost Allocations	(2,782)	(8,910)	(8,795)	20-30
TOTAL - WATER DIVISION	14,932	35,636	34,355	

MEMPHIS LIGHT, GAS AND WATER DIVISION
SELECT CAPITAL EXPENDITURE BUDGETS
FOR CALENDAR YEAR OF 2022

WATER DIVISION

PAGE 21

DESCRIPTION	IN BUDGET YEAR	REF. NO.
<u>PRODUCTION SYSTEM</u>		
<u>PUMPING STATIONS</u>		
Allen Pumping Station		
Station Rehabilitation	5,000,000	21-1
Medium Voltage Breaker & Switchgear Replacements (CO)	950,000	21-2
Generator Replacement	200,000	21-3
Dedicated Well Electric Circuit Replacement	100,000	21-4
Install Distributed Process Control System Replacement	30,000	21-5
Total Allen Pumping Station	6,280,000	
Davis Pumping Station		
VFD, Motor & Transformer Replacements	300,000	21-6
Station Rehabilitation (CO)	180,000	21-7
Total Davis Pumping Station	480,000	
Lichterman Pumping Station		
Install Distributed Process Control System Replacement	90,000	21-8
Engineer Distributed Process Control System Replacement (CO)	60,000	21-9
Total Lichterman Pumping Station	150,000	
Mallory Pumping Station		
VFD, Motor & Transformer Replacements	180,000	21-10
Generator Replacement (CO)	160,000	21-11
Filter Media Replacement (CO)	143,750	21-12
Total Mallory Pumping Station	483,750	
McCord Pumping Station		
VFD, Motor & Transformer Replacements	60,000	21-13
Total McCord Pumping Station	60,000	
Morton Pumping Station		
VFD, Motor & Transformer Replacements	1,200,000	21-14
Install Distributed Process Control System Replacement	960,000	21-15
Engineer Distributed Process Control System Replacement	20,000	21-16
Total Morton Pumping Station	2,180,000	
Palmer Pumping Station		
Engineer Distributed Process Control System Replacement	490,000	21-17
Install Distributed Process Control System Replacement	20,000	21-18
Total Palmer Pumping Station	510,000	
Shaw Pumping Station		
VFD, Motor & Transformer Replacements	850,000	21-19
Total Shaw Pumping Station	850,000	
Sheehan Pumping Station		
Station Rehabilitation (CO)	350,000	21-20
Total Sheehan Pumping Station	350,000	
Pickel Pumping Station		
Engineer Water Treatment Plant	250,000	21-21
Total Pickel Pumping Station	250,000	

MEMPHIS LIGHT, GAS AND WATER DIVISION
SELECT CAPITAL EXPENDITURE BUDGETS
FOR CALENDAR YEAR OF 2022

WATER DIVISION

PAGE 22

DESCRIPTION	IN BUDGET YEAR	REF. NO.
<u>PUMPING STATIONS CONT.</u>		
Miscellaneous Pumping Facilities		
Water Operations Capital Items (CO)	1,000,000	22-1
Engineering Services Contract (CO)	500,000	22-2
Total Miscellaneous Pumping Facilities	1,500,000	
TOTAL PUMPING STATIONS	13,093,750	
<u>UNDERGROUND STORAGE RESERVOIRS</u>		
Mallory Pumping Station		
Construct Wash Water Recovery Basin Replacement (CO)	1,100,000	22-3
Sheehan Pumping Station		
Engineer Wash Water Recovery Basin Replacement	200,000	22-4
Total Underground Storage Reservoirs	1,300,000	
<u>PRODUCTION WELLS</u>		
Mallory Pumping Station - Construct/Replace Well	1,455,900	22-5
Morton Pumping Station - Construct/Replace Well	1,455,900	22-6
Sheehan Pumping Station - Construct/Replace Well	1,455,900	22-7
Well Failures	1,455,900	22-8
Abandon Wells	300,000	22-9
TOTAL PRODUCTION WELLS	6,123,600	
<u>OPERATIONS MAINTENANCE</u>	1,000,000	22-10
<u>LAND PURCHASE</u>	75,000	22-11
<u>Buildings and Structures</u>		
<u>McCord Pumping Station</u>		
Aerator Bldg: Replace Roof (6825 sf)	200,000	22-12
Reroof Main Building (15930 sf)	454,000	22-13
<u>Davis Pumping Station</u>		
Replace Roof - 14,100 sf	350,000	22-14
<u>Lichterman Pumping Station</u>		
Aerator Bldg: Replace Roof	225,000	22-15
<u>Water Lab</u>		
Replace Emergency Generator	170,000	22-16
Total Buildings and Structures	1,399,000	
<u>CONTINGENCY FUND - PRODUCTION SYSTEM</u>	50,000	22-17
TOTAL PRODUCTION SYSTEM	23,041,350	

MEMPHIS LIGHT, GAS AND WATER DIVISION
SELECT CAPITAL EXPENDITURE BUDGETS
FOR CALENDAR YEAR OF 2022

WATER DIVISION

PAGE 23

DESCRIPTION	IN BUDGET YEAR	REF. NO.
<u>DISTRIBUTION SYSTEM - MAJOR PROJECTS</u>		
<u>NEW WATER MAIN</u>		
Collecting Main Installation	500,000	23-1
Main Replacement Projects	400,000	23-2
Large Main Extensions	400,000	23-3
Miscellaneous Projects - Reimbursable	315,000	23-4
Major Valve Replacements/Additions	198,777	23-5
Miscellaneous Projections	175,000	23-6
Minor System Improvements	50,000	23-7
TOTAL NEW WATER MAIN	2,038,777	
<u>STREET IMPROVEMENTS</u>		
TDOT Projects	2,181,268	23-8
City of Lakeland Projects	500,000	23-9
City of Memphis Projects	500,000	23-10
Shelby County Projects	500,000	23-11
City of Bartlett Projects	375,000	23-12
Miscellaneous Projections	85,000	23-13
TOTAL STREET IMPROVEMENTS	4,141,268	
LEAD REPLACEMENT	2,500,000	23-14
TOTAL DISTRIBUTION SYSTEM - MAJOR PROJECTS	8,680,045	
<u>GENERAL PLANT</u>		
<u>IS/IT PROJECT</u>		
Laboratory Information Management System Replacement	130,000	23-15
TOTAL IS/IT PROJECT	130,000	
WATER - SECURITY AUTOMATION	164,160	23-16
WATER - FLEET CAPITAL POWER OPERATED EQUIP	379,928	23-17
WATER - FLEET CAPITAL WATER TRANSPORTATION EQUIP	1,319,866	23-18
<u>CONTINGENCY FUNDS - GENERAL PLANT</u>	200,000	23-19
TOTAL GENERAL PLANT	2,193,954	

MEMPHIS LIGHT, GAS AND WATER DIVISION
CAPITAL CARRYOVER SUMMARY*
FOR CALENDAR YEAR OF 2022

WATER DIVISION

PAGE 24

<u>CAPITAL CARRYOVER CATEGORY</u>	<u>CARRYOVER AMOUNT</u>
Production	5,343,750
Distribution	825,000
Power Transportation Equipment	824,807
IS/IT Projects	130,000
Security Automation	<u>69,120</u>
TOTAL CAPITAL CARRYOVER SUMMARY	<u><u>7,192,677</u></u>

*Carryover items constitute the funding necessary for capital projects or purchases not completed during the prior budget year. This would include projects which may have been delayed, large projects requiring multiple years to complete, or commodities ordered but not received. These items are part of the total 2022 Budget.



2022 - 2026 CAPITAL IMPROVEMENT PROGRAM



2022 Electric Capital Summary

DESCRIPTION	2021 PROJECTION	2022 BUDGET	2023 PROJECTION	2024 PROJECTION	2025 PROJECTION	2026 PROJECTION
SUBSTATION AND TRANSMISSION						
Substation	\$ 9,952,081	\$ 19,781,748	\$ 24,421,469	\$ 12,170,330	\$ 7,436,996	\$ 5,065,000
Substation Circuit Breakers	\$ 2,993,111	\$ 4,123,591	\$ 3,350,000	\$ 3,350,000	\$ 3,350,000	\$ 3,350,000
Substation Transformers	\$ 13,949,670	\$ 6,102,399	\$ 6,000,000	\$ 6,000,000	\$ 6,000,000	\$ 6,000,000
Transmission Lines	\$ 2,300,000	\$ 8,190,000	\$ 9,335,537	\$ 2,000,000	\$ 2,000,000	\$ 1,000,000
CONTRIBUTIONS IN AID OF CONSTRUCTION	\$ (480,000)	\$ (5,444,294)	\$ (5,425,569)	\$ -	\$ -	\$ -
TOTAL - SUBSTATION & TRANSMISSION	\$ 28,714,862	\$ 32,753,444	\$ 37,681,437	\$ 23,520,330	\$ 18,786,996	\$ 15,415,000
DISTRIBUTION SYSTEM						
Apartments	\$ 1,643,181	\$ 1,708,908	\$ 1,777,264	\$ 1,848,355	\$ 1,903,806	\$ 1,960,920
Def. Cable/Trans Replace	\$ -	\$ 11,800,000	\$ 11,800,000	\$ 11,800,000	\$ 11,800,000	\$ 11,800,000
Demolition	\$ -	\$ 71,865	\$ 73,302	\$ 74,768	\$ 76,264	\$ 77,789
Emergency Maintenance	\$ -	\$ 6,076,011	\$ 6,197,531	\$ 6,321,482	\$ 6,447,912	\$ 6,576,870
General Power Service	\$ 6,596,874	\$ 13,860,749	\$ 19,135,179	\$ 18,420,586	\$ 14,393,204	\$ 7,872,500
General Power Service S/D	\$ 267,176	\$ 277,863	\$ 288,977	\$ 300,536	\$ 309,552	\$ 318,839
Leased Outdoor Lighting	\$ 427,225	\$ 444,314	\$ 462,086	\$ 480,570	\$ 494,987	\$ 509,836
ELEC - DUCT LINE LEASE	\$ -	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000
Distribution Automation	\$ 7,650,000	\$ 31,000,000	\$ 31,000,000	\$ 32,000,000	\$ 32,000,000	\$ 10,000,000
Line Reconstruction	\$ 826,130	\$ 4,250,000	\$ 4,250,000	\$ 3,250,000	\$ 3,250,000	\$ 2,750,000
Multiple-Unit Gen Power	\$ 399,948	\$ 415,945	\$ 432,583	\$ 449,887	\$ 463,383	\$ 477,285
New Circuits	\$ -	\$ 7,600,000	\$ 7,500,000	\$ 2,500,000	\$ 1,000,000	\$ 1,000,000
Voltage Conversion	\$ -	\$ 20,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000
Operations Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Planned Maintenance	\$ 9,675,820	\$ 9,869,234	\$ 10,066,619	\$ 10,267,951	\$ 10,473,310	\$ 10,682,776
Distribution Pole Replacement	\$ 1,500,000	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000	\$ -
Tree Trimming	\$ -	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ -
Relocate at Customer Req	\$ 2,337,257	\$ 6,430,747	\$ 6,559,362	\$ 6,690,549	\$ 6,824,360	\$ 6,960,848
Residential S/D	\$ 117,150	\$ 121,836	\$ 126,709	\$ 131,778	\$ 135,731	\$ 139,803
Residential Svc in S/D	\$ 140,030	\$ 145,631	\$ 151,456	\$ 157,514	\$ 162,240	\$ 167,107
Residential Svc not S/D	\$ 2,009,412	\$ 2,089,789	\$ 2,173,380	\$ 2,260,315	\$ 2,328,125	\$ 2,397,969
JT-Resident S/D	\$ 1,870,700	\$ 1,945,528	\$ 2,023,350	\$ 2,104,284	\$ 2,167,412	\$ 2,232,434
JT-Resident Svc not S/D	\$ 18,768	\$ 19,519	\$ 20,300	\$ 21,112	\$ 21,745	\$ 22,397
JT-Residential Svc in S/D	\$ 679,804	\$ 706,996	\$ 735,276	\$ 764,687	\$ 787,627	\$ 811,256
Shared Use contract	\$ -	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000
Storm Restoration	\$ 1,484,767	\$ -	\$ -	\$ -	\$ -	\$ -
Street Improvements	\$ -	\$ 14,555,589	\$ 1,650,000	\$ 1,300,000	\$ 1,300,000	\$ 1,300,000
Street Light Maintenance	\$ 2,080,800	\$ 2,122,416	\$ 2,164,864	\$ 2,208,162	\$ 2,252,325	\$ 2,297,371
Street Lights Install	\$ -	\$ 11,900,000	\$ 10,000,000	\$ 8,050,000	\$ 5,750,000	\$ -
Temporary Service	\$ 775,597	\$ 806,621	\$ 838,886	\$ 872,441	\$ 898,615	\$ 925,573
Previously Capitalized Items - Capacitor Banks	\$ -	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ -
Previously Capitalized Items - Transformers	\$ 6,154,680	\$ 6,277,774	\$ 6,403,329	\$ 6,531,396	\$ 6,662,024	\$ 6,795,264
Previously Capitalized Items - Meters	\$ 478,000	\$ 2,368,000	\$ 1,592,000	\$ 1,929,000	\$ 2,292,000	\$ 1,946,000
Contributions in Aid of Construction	\$ (10,114,106)	\$ (28,199,107)	\$ (26,962,115)	\$ (22,779,921)	\$ (20,733,312)	\$ (10,570,260)
TOTAL - DISTRIBUTION SYSTEM	\$ 37,019,213	\$ 112,521,228	\$ 105,295,340	\$ 102,790,452	\$ 98,296,309	\$ 71,027,577
GENERAL PLANT						
Purchase of Land	\$ -	\$ 1,200,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000
Buildings/Structures	\$ 779,300	\$ 5,006,100	\$ 28,925,100	\$ 19,719,500	\$ 300,000	\$ -
Capital Security Automation	\$ 4,446,008	\$ 2,957,832	\$ 288,403	\$ 300,000	\$ 100,000	\$ 40,000
Lab and Test	\$ 216,702	\$ 862,360	\$ 320,922	\$ 336,968	\$ 353,817	\$ 371,507
Tools and Equipment	\$ -	\$ -	\$ 36,250	\$ 38,065	\$ 41,964	\$ 44,062
Utility Monitoring	\$ 106,301	\$ 1,119,750	\$ 810,000	\$ 1,200,000	\$ 1,050,000	\$ 650,000
Communication Equip	\$ 95,040	\$ 91,152	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Communication Towers	\$ -	\$ 8,117,513	\$ 600,000	\$ 600,000	\$ 600,000	\$ 600,000
Telecommunication Network	\$ 2,330,820	\$ 4,477,800	\$ 4,816,000	\$ 4,816,000	\$ 3,116,000	\$ 3,116,000
Fleet Capital Power Operated Equipment	\$ 1,732,818	\$ 3,665,574	\$ 3,775,542	\$ 3,888,808	\$ 4,005,472	\$ 4,125,636
Transportation Equipment	\$ 1,236,341	\$ 4,737,164	\$ 4,879,279	\$ 5,025,657	\$ 5,176,427	\$ 5,331,720
Data Processing	\$ 2,896,488	\$ 5,433,739	\$ 8,370,000	\$ 10,200,000	\$ 10,750,000	\$ 6,750,000
IS/IT Projects	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CIS Development	\$ 1,673,250	\$ 7,675,423	\$ 5,125,000	\$ 5,125,000	\$ 4,125,000	\$ 3,000,000
Business Continuity	\$ 1,433,926	\$ 555,000	\$ 1,600,000	\$ 1,600,000	\$ 1,600,000	\$ 1,600,000
Contingency Fund - General Plant	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
TOTAL - GENERAL PLANT	\$ 17,146,994	\$ 46,099,408	\$ 60,196,496	\$ 53,499,998	\$ 31,868,680	\$ 26,278,925
Delayed Cost Allocations	\$ (4,242,250)	\$ (35,592,509)	\$ (38,786,205)	\$ (35,113,708)	\$ (28,941,947)	\$ (21,695,851)
TOTAL - ELECTRIC DIVISION	\$ 78,638,819	\$ 155,781,570	\$ 164,387,067	\$ 144,697,072	\$ 120,010,038	\$ 91,025,652

2022 GAS CAPITAL SUMMARY

GAS DIVISION

DESCRIPTION	2021 PROJECTION	2022 BUDGET	2023 PROJECTION	2024 PROJECTION	2025 PROJECTION	2026 PROJECTION
PRODUCTION SYSTEM						
LNG - Processing Facilities	\$ 220,000	\$ 200,000	\$ 507,000	\$ 100,000	\$ 1,425,000	\$ 1,325,000
CNG Stations	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL PRODUCTION SYSTEM	\$ 220,000	\$ 200,000	\$ 507,000	\$ 100,000	\$ 1,425,000	\$ 1,325,000
DISTRIBUTION SYSTEM						
Apartments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Demolition	\$ 73,467					
Emergency Maintenance	\$ 849,256	\$ 1,578,104	\$ 1,609,666	\$ 1,641,859	\$ 1,674,696	\$ 1,708,190
Gas Main-Svc Repl (DOT)	\$ 4,874,000	\$ 5,535,000	\$ 5,415,000	\$ 5,415,000	\$ 5,415,000	\$ 5,415,000
Gate Stations	\$ 3,200	\$ 1,500,000	\$ 1,500,000	\$ -	\$ -	\$ -
General Power S/D	\$ 244,361	\$ 254,135	\$ 264,300	\$ 274,872	\$ 283,118	\$ 291,612
General Power Service	\$ 1,488,877	\$ 6,412,841	\$ 4,575,755	\$ 1,430,785	\$ 1,473,709	\$ 1,517,920
Multiple-Unit Gen Power	\$ 50,108	\$ 52,112	\$ 54,196	\$ 56,364	\$ 58,055	\$ 59,797
New Gas Main	\$ 674,920	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000
Trans Pipeline/Facilities	\$ 1,624,000	\$ 2,400,000	\$ 2,550,000	\$ 14,500,000	\$ 2,500,000	\$ 2,500,000
Purchase of Land	\$ 4,105	\$ 225,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000
Operations Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Planned Maintenance	\$ 3,899,903	\$ 4,993,920	\$ 5,093,798	\$ 5,195,674	\$ 5,299,588	\$ 5,405,580
Regulator Stations	\$ 1,100,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000
Relocate at Customer Req	\$ 328,280	\$ 341,411	\$ 355,067	\$ 369,270	\$ 380,348	\$ 391,758
Residential Svc in S/D	\$ 11,689	\$ 12,156	\$ 12,643	\$ 13,148	\$ 13,543	\$ 13,949
Residential Svc not S/D	\$ 921,820	\$ 958,692	\$ 997,040	\$ 1,036,922	\$ 1,068,029	\$ 1,100,070
Street Improvements	\$ 817,000	\$ 5,261,140	\$ 1,250,000	\$ 1,250,000	\$ 1,250,000	\$ 1,250,000
JT-Resident S/D	\$ 685,595	\$ 713,019	\$ 741,540	\$ 771,202	\$ 794,338	\$ 818,168
JT-Resident Svc not S/D	\$ 15,573	\$ 16,196	\$ 16,844	\$ 17,518	\$ 18,044	\$ 18,585
JT-Resident in S/D	\$ 396,785	\$ 412,656	\$ 429,162	\$ 446,329	\$ 459,718	\$ 473,510
Previously Capitalized Items - Meters & Metering Equipment	\$ 2,376,000	\$ 2,745,000	\$ 2,330,000	\$ 2,334,000	\$ 2,396,000	\$ 2,693,000
Contributions in Aid of Construction	\$ (1,206,791)	\$ (5,004,877)	\$ (3,903,365)	\$ (2,156,206)	\$ (2,570,103)	\$ (2,996,416)
TOTAL DISTRIBUTION SYSTEM	\$ 19,232,148	\$ 29,656,506	\$ 24,616,647	\$ 33,921,737	\$ 21,839,083	\$ 21,985,722
GENERAL PLANT						
Buildings/Structures	\$ 2,653,300	\$ 6,595,100	\$ 3,993,000	\$ 488,200	\$ 3,500,000	\$ -
Capital Security Automation	\$ 164,400	\$ 940,730	\$ 172,800	\$ 227,063	\$ 120,000	\$ 20,000
Furniture & Fixtures	\$ -	\$ 237,600	\$ -	\$ -	\$ -	\$ -
Tools and Equipment	\$ -	\$ 11,340	\$ 36,250	\$ 38,063	\$ 41,964	\$ 44,062
Tools and Equipment - Common	\$ -	\$ 132,968	\$ 133,832	\$ 140,524	\$ 147,550	\$ 154,927
Fleet Capital Transportation & Power Operated Equipment - Gas	\$ 2,121,615	\$ 4,123,778	\$ 4,247,491	\$ 4,374,916	\$ 4,506,163	\$ 4,641,348
Fleet Capital Transportation Equipment & Power Operated Equipment - Common	\$ 1,648,293	\$ 5,580,960	\$ 5,748,389	\$ 5,920,841	\$ 6,098,466	\$ 6,281,420
IS/IT Projects	\$ -	\$ 438,387	\$ -	\$ -	\$ -	\$ -
Contingency Fund - General Plant	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
TOTAL - GENERAL PLANT	\$ 6,787,608	\$ 18,260,863	\$ 14,531,762	\$ 11,389,607	\$ 14,614,144	\$ 11,341,757
Delayed Cost Allocations	\$ -	\$ (8,358,362)	\$ (6,951,165)	\$ (8,102,352)	\$ (6,595,729)	\$ (5,950,579)
TOTAL - GAS DIVISION	\$ 26,239,756	\$ 39,759,007	\$ 32,704,244	\$ 37,308,992	\$ 31,282,498	\$ 28,701,901

2022 WATER CAPITAL SUMMARY

DESCRIPTION	2021 PROJECTION	2022 BUDGET	2023 PROJECTION	2024 PROJECTION	2025 PROJECTION	2026 PROJECTION
PRODUCTION SYSTEM						
Production Wells	\$ 1,405,450	\$ 6,123,600	\$ 6,123,600	\$ 6,123,600	\$ 6,123,600	\$ 3,660,000
Pumping Stations	\$ 3,055,000	\$ 13,093,750	\$ 32,256,250	\$ 31,155,000	\$ 18,280,000	\$ 7,410,000
Underground Storage Reservoirs	\$ 6,185,000	\$ 1,300,000	\$ 100,000	\$ 500,000	\$ 4,850,000	\$ 1,800,000
Purchase of Land	\$ -	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000
Operations Maintenance	\$ 560,839	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000
Contingency Fund - Production system	\$ -	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
SUBTOTAL - PRODUCTION SYSTEM	\$ 11,206,289	\$ 21,642,350	\$ 39,604,850	\$ 38,903,600	\$ 30,378,600	\$ 13,995,000
SUBTOTAL - BLDGS. AND STRUCTURES	\$ -	\$ 1,399,000	\$ 3,760,000	\$ 238,000	\$ 120,000	\$ -
TOTAL PROD. SYSTEM w/BLDGS & STRU	\$ 11,206,289	\$ 23,041,350	\$ 43,364,850	\$ 39,141,600	\$ 30,498,600	\$ 13,995,000
DISTRIBUTION SYSTEM						
Apartments	\$ 21,900	\$ 22,776	\$ 23,687	\$ 24,634	\$ 25,373	\$ 26,135
Emergency Maintenance	\$ 3,217,105	\$ 3,330,384	\$ 3,396,992	\$ 3,464,933	\$ 3,534,232	\$ 3,604,916
General Power Service	\$ 3,204,397	\$ 3,332,573	\$ 3,465,876	\$ 3,604,511	\$ 3,712,646	\$ 3,824,025
New Water Main	\$ 2,100,000	\$ 2,038,777	\$ 2,053,754	\$ 2,063,730	\$ 2,048,705	\$ 2,048,705
Lead Service Replacement	\$ 1,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000
Planned Maintenance	\$ 2,385,919	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000
Relocate at Customer Req	\$ 100,342	\$ 104,355	\$ 108,529	\$ 112,871	\$ 116,257	\$ 119,744
Residential S/D	\$ 192,030	\$ 199,711	\$ 207,699	\$ 216,007	\$ 222,488	\$ 229,162
Residential Svc in S/D	\$ 239,198	\$ 248,766	\$ 258,716	\$ 269,065	\$ 277,137	\$ 285,451
Residential Svc not S/D	\$ 354,189	\$ 368,357	\$ 383,091	\$ 398,415	\$ 410,367	\$ 422,678
Street Improvements	\$ 975,000	\$ 4,141,268	\$ 3,500,000	\$ 3,000,000	\$ 2,000,000	\$ 2,000,000
WATER - STORM RESTORATION	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Previously Capitalized Items - Meters	\$ 777,000	\$ 1,682,000	\$ 1,665,000	\$ 1,596,000	\$ 1,705,000	\$ 1,774,000
Contributions in Aid of Construction	\$ (5,177,476)	\$ (3,053,743)	\$ (3,113,518)	\$ (3,164,389)	\$ (3,206,377)	\$ (3,206,377)
TOTAL - DISTRIBUTION SYSTEM	\$ 9,889,604	\$ 17,915,223	\$ 17,449,827	\$ 17,085,777	\$ 16,345,829	\$ 16,628,441
GENERAL PLANT						
Buildings/Structures	\$ -	\$ -	\$ -	\$ -		
Capital Security Automation	\$ -	\$ 164,160	\$ 82,080	\$ 44,280	\$ 111,840	\$ 100,000
Fleet Capital Power Operated Equipment	\$ 24,039	\$ 379,929	\$ 391,326	\$ 403,065	\$ 415,157	\$ 427,612
Transportation Equipment	\$ 1,952,822	\$ 1,319,866	\$ 1,359,461	\$ 1,400,245	\$ 1,442,253	\$ 1,485,520
IS/IT Projects Water	\$ 120,000	\$ 130,000	\$ -	\$ -	\$ -	\$ -
Tools and Equipment	\$ -	\$ -	\$ 36,250	\$ 38,063	\$ 39,966	\$ 41,963
Contingency Fund - General Plant	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
TOTAL - GENERAL PLANT	\$ 2,296,861	\$ 2,193,955	\$ 2,069,117	\$ 2,085,653	\$ 2,209,215	\$ 2,255,096
Delayed Cost Allocations	\$ -	\$ (8,795,032)	\$ (13,263,293)	\$ (12,349,140)	\$ (10,497,262)	\$ (7,262,241)
TOTAL - WATER DIVISION	\$ 23,392,754	\$ 34,355,496	\$ 49,620,501	\$ 45,963,890	\$ 38,556,382	\$ 25,616,295

(This Page Intentionally Left Blank)

NOTES FOR PAGE 3—Capital Expenditures Budget

Total Capital Expenditures

3-1	Total Capital Expenditures	Expected capital spend in 2022 budget year.
------------	-----------------------------------	---

NOTES FOR PAGE 4—INCOME & EXPENSE COMPARISON

Operating Revenue

4-1	Sales Revenue	This account includes projected revenue from the sale of electricity to the residential, commercial, industrial, outdoor lighting and traffic signal, and interdepartmental customer classes.
4-2	Revenue Adjustment for Uncollectibles	Per Governmental Accounting Standards Board (GASB) 34 requirements, bad debt expense must be shown as a reduction of revenue. This is the amount that will not be collected due to customer's inability to pay.
4-3	Non-Sales Revenue	This account includes revenue from forfeited discounts (extra charges for payments received after net due date), plus rent charged for Electric Division property that is used by the Gas and Water Divisions, and other miscellaneous revenue (e.g., fees for connecting service).

Operating Expense

4-4	Purchased Power	This account includes the cost of electricity purchased from TVA for resale to customers.
4-5	Transmission Expense	This account includes the cost of labor and expenses incurred in the supervision and operation of the transmission system. Included are load dispatching operations, transmission substations, switching stations, overhead and underground line expenses, and miscellaneous transmission expenses. Included in this account are inspecting and testing circuit breakers, switches, breakers, load testing of circuits, line patrolling, and routine inspection of manholes, conduit, network and transformer vaults.
4-6	Distribution Expense	This account includes the cost of labor and expenses incurred in the supervision and direct labor of the operation of the distribution system. Included are direct switching, arranging and controlling clearances for construction, maintenance test and emergencies, communication services provided for system control purposes and controlling system voltages. Also included are the expenses for operation of the overhead and underground distribution lines and stations, street lighting, meter expenses, work on customer installations in inspecting premises and in rendering services to customers, miscellaneous expenses and
4-7	Customer Accounts Expense	This account includes the cost of labor, materials and expenses used in work on customer applications, contracts, orders, credit investigations, billing and accounting, collections and complaints. It also includes meter reading expenses.
4-8	Customer Service and Information Expense	This account includes the cost of labor, materials and expenses incurred in providing instructions or assistance to customers, the object of which is to encourage safe, efficient, and economical use of services, and activities which convey information in utilizing electric services to protect health and safety, to encourage environmental protection, to use electrical equipment safely and economically and to conserve electric energy.
4-9	Sales Expense	This account includes the cost of labor, materials and expenses incurred in promotional, demonstrating and selling activities, advertising designed to promote or retain the use of utility services and miscellaneous sales expense. Included are exhibitions, displays, lectures, engineering and technical advice, advertising in newspapers, periodicals, billboards, radio, etc., postage on direct mail advertising, printing booklets, bulletins, etc.
4-10	Administrative and General Expense	This account includes the compensation of board members, executives, and other administrative and general employees of the utility not chargeable directly to a particular operating function. It also includes the cost of insurance to protect the utility against physical plant losses, cost of reserve accruals to protect the utility against injuries and damage claims of employees or others, such as liability, property damage, casualty, and employee liability. Employee pensions and benefits including payments to pension funds, life insurance, group medical expenses, payments for accident, sickness, hospital and death benefits, and expenses in connection with educational and wellness activities are also included in this account. In accordance with GASB 45, <i>Accounting and Financial Reporting by Employers for Postemployment Benefits Other than Pension</i> , MLGW must recognize all post-employment benefits, such as medical insurance and life insurance, when earned, effective budget year 2007.

Maintenance Expense

4-11	Transmission Expense	This account includes the cost of labor, materials and expenses incurred in the maintenance of the transmission system, of structures, and station equipment. This includes maintenance of overhead lines and underground lines.
4-12	Distribution Expense	This account includes the cost of labor, materials, and expenses incurred in the maintenance of the distribution system, structures, plant, station equipment, overhead lines and underground lines, distribution line transformers, street lighting and signal systems, meters, and other miscellaneous distribution plant.
4-13	Administrative and General Expense	Please see Appendix 4-10.

NOTES FOR PAGE 4—INCOME & EXPENSE COMPARISON (Continued)**Other Operating Expense**

4-14	Depreciation Expense	The purpose of depreciation is to allocate the original cost of a fixed asset over its estimated useful life. In a utility environment, the annual depreciation rate also takes into account the estimated salvage and cost of removal upon retirement.
4-15	Payment in Lieu of Taxes	Payment in lieu of taxes is the amount paid to the municipalities in which MLGW has plant. The formula for payment in lieu of taxes is based on the Municipal Electric System Tax Equivalent Law of 1987 and the Municipal Gas Equivalent Law which became effective July 1, 1988. The tax formula has two parts--net investment and revenue. The net investment includes plant in service and held for future use (net of depreciation), construction work-in-progress and materials inventory. The net investment is multiplied by an assessment ratio, the property tax rates for each governmental body, and an equalization rate set by the State. The revenue part of the formula is 4% of a three-year average of operating revenue less power cost.
4-16	F.I.C.A. Taxes	This represents the 1.45% Medicare portion of Social Security Tax which is required to be paid on all MLGW employees hired after 03-31-86.
4-17	Amortization of Legacy Meters	This account includes amortization charges related to expenditures on meters.
4-18	Amortization of Software	This account includes amortization charges related to expenditures on software.

Income

4-19	Operating Income	Operating income is equal to operating revenue less total operating expense.
4-20	Other Income	This consists primarily of investment income and property rentals and the electric prepayment agreement. It does not include any sales of electricity, gas or water.
4-21	Reduction of Plant Recovered through CIAC	Contributions in aid of construction are the donations or contributions of cash, services, or property from states, municipalities, or other governmental agencies, individuals, and others for construction purposes.

Debt Expense

4-22	Interest Expense - Existing Long-Term Debt	Bond interest payments due 06-01-2021 and 12-01-2021 per the bond debt schedules are funded in equal monthly installments in 2021.
4-23	Amortization of Debt Discount and Expense	This represents the spreading of bond issuance costs over the life span of the bond series rather than recognizing such costs all at the time of sale.
4-24	Contributions in Aid of Construction	Contributions in aid of construction are the donations or contributions of cash, services, or property from states, municipalities, or other governmental agencies, individuals, and others for construction purposes.

NOTES FOR PAGE 5—SOURCES AND APPLICATION OF FUNDS**Source of Funds**

5-1	Change in Net Position	Please see Budget page 4.
5-2	Depreciation Charged to Operating Income	Please see Appendix 4-14.
5-3	Depreciation Charged to Other Accounts	Depreciation charged to other accounts is the annual depreciation for transportation and power operated equipment. Depreciation on these plant items is charged to a clearing account and used in the equipment rate calculations.
5-4	Amortization of Legacy Meters	Non-cash expense related to amortization charges related to meter expenditures.
5-5	Amortization of Software	Non-cash expense related to amortization charges related to software expenditures.
5-6	Salvage	Salvage is the amount received for property retired from plant in service. The property may be sold for scrap or returned to stores inventory for reuse.
5-7	Debt Issuance	Expected debt issuance in the Electric Division for the 2021 budget year.

Application of Funds

5-8	Capital Expenditures	Please see Budget page 6.
5-9	Costs of Removal and Other Charges to the Reserve for Depreciation	cost of removal is the cost associated with demolishing, dismantling, tearing down or otherwise removing utility plant, including the cost of transportation and labor.
5-10	Retirement of Long-Term Debt	Bond principal amounts due 12-01-2021 per the bond debt schedules are funded in equal monthly

NOTES FOR PAGE 6—CAPITAL EXPENDITURES

Substation and Transmission

6-1	Substation	Please see Appendix 7-1 through 7-25.
6-2	Substation Transformers Replacement	Please see Appendix 7-26 through 7-27.
6-3	Substation Circuit Breakers Replacement	Please see Appendix 7-28 through 7-40.
6-4	Transmission Lines	Please see Appendix 8-1 through 8-10.
6-5	Contributions in Aid of Construction	Contributions in aid of construction are the donations or contributions of cash, services, or property from states, municipalities, or other governmental agencies, individuals, and others for construction purposes.

Distribution System**Major Projects**

6-6	Residential Service in S/D	All subdivisions that are fed internally by overhead electric primary lines.
6-7	Residential Service Not in S/D	Property not in subdivisions fed internally by overhead electric primary lines.
6-8	Residential S/D	Other property not in subdivisions fed internally by overhead electric primary lines.
6-9	Apartments	All apartments and mobile home communities that are fed internally by overhead electric primary lines.
6-10	General Power Service	Commercial properties that are fed internally by overhead or underground electric primary lines
6-11	General Power S/D	Commercial properties in subdivisions that are fed internally by overhead or underground electric primary lines
6-12	Mobile Home Park	All apartments and mobile home communities that are fed internally by overhead electric primary lines. No expenditures for the 2022 budget year.
6-13	Temporary Service	Services used for temporary construction
6-14	Multiple Unit General Power	Commercial properties and apartments that are fed internally by overhead or underground electric primary lines
6-15	Relocate At Customer Request	This budget category provides for the expenses incurred at customers request for facilities to be relocated.
6-16	Street Improvements	This budget category provides for the expenses incurred when City, State and Federal Street Improvements dictate that facilities must be relocated. Please see Appendix 8-18 through 8-25.
6-17	New Circuits	Please see Appendix 8-10 through 8-15.
6-18	Voltage Conversion	This budget category describes projects whereby existing distribution lines are modified to have the system operated voltage converted from 12 KV to 23 KV.
6-19	Line Reconstruction/Remove Idle Facilities	This category describes projects whereby existing distribution lines are improved and/or removed. These projects can include instances where existing circuits are rebuilt to create ties to other circuits to improve reliability to customers; conductors are upgraded to increase the current carrying ability of the circuit; devices such as switches, voltage regulators, capacitors, or reclosers are added to a circuit to improve voltage/reliability; or existing idle facilities are removed to decrease losses.
6-20	Defect Cable/Feeder Cable Replacement	This category describes the systematic retrofitting of the Division's Underground Residential Distribution system. The cable is replaced as it reaches end-of-life as determined by in service failures. Obsolete transformers and other distribution hardware are also replaced in this category. Cable replacement was initiated in 1982.
6-21	Distribution Poles	The budget includes utility poles used to support overhead power lines and various other public utilities, such as electrical cable, fiber optic cable, and related equipment such as transformers and street lights.
6-22	Distribution Automation	To install communications and hardware to allow for remote/automated operation to provide for more advanced restoration capabilities.

NOTES FOR PAGE 6—CAPITAL EXPENDITURES (Continued)

Major Projects (Continued)

6-23	Street Lights Install	The 2022 budget includes work necessary to provide street light maintenance in existing subdivisions, along roadways, Memphis city annexations, and adjustments to lights in existing developments requested by the cities throughout the year.
6-24	Demolition	The 2022 budget includes demolition work.
6-25	Street Light Maintenance	The 2022 budget includes work necessary to provide street light maintenance in existing subdivisions, along roadways, Memphis city annexations, and adjustments to lights in existing developments requested by the cities throughout the year.
6-26	Planned Maintenance	Construction in minor work that arises daily. These are mainly calls that go through the Control Room, to include pole knockdowns, gas, and water leaks, etc.
6-27	Tree Trimming	Trim or remove trees interfering with overhead lines.
6-28	Operations Maintenance	No expenditures planned for the 2022 budget year.
6-29	Leased Outdoor Lighting (LOL)	LOL provides area and security lighting for residential, commercial and industrial customers in Memphis and Shelby County. LOL customers pay aid-to-construction for the installation of lighting fixtures and a monthly flat rate energy and facility fee. Services provided through LOL include engineering design of lighting systems to meet customer needs as well as building codes and standards. Installation and maintenance are handled through Distribution Support, using Division personnel and contracted labor.
6-30	Storm Restoration	This category shows actual expenditures for previous years related to storm restoration efforts. MLGW does not budget for unexpected storm related expenses. These storms are generally large enough to cause major damage to our electric distribution system. Funds expensed in this category are reimbursable by the Federal Emergency Management Agency.
6-31	Shared Use Contract	To account for small cell pole attachments.
6-32	Duct Line Lease	To account for leasing available duct line for fiber cable.
6-33	Emergency Maintenance	Emergency maintenance is minor capital unplanned work that arises daily. These are mainly calls that go through the Control Room, such as pole knockdowns, gas or water leaks, etc.
6-34	JT-Residential Service in S/D	All subdivisions that are fed internally by underground electric primary lines and all subdivisions and apartments that are joint trench (underground electric primary and gas in the same trench).
6-35	JT-Residential Service Not in S/D	All subdivisions that are fed internally by underground electric primary lines and all subdivisions and apartments that are joint trench (underground electric primary and gas in the same trench).
6-36	JT-Residential S/D	All subdivisions that are fed internally by underground electric primary lines and all subdivisions and apartments that are joint trench (underground electric primary and gas in the same trench).
6-37	JT-Apartments	No expenditures planned for the 2022 budget year.
6-38	PCI-Capacitor Banks	To change out PCB contaminated capacitor banks.
6-39	PCI- Dist. Transformers	Purchase, receive, test and stock overhead type transformers for the Overhead Electric Distribution System -inventory levels are closely managed based on growth, new construction, history, voltage conversions and failures.
6-40	Elec Meters	The Electric Meter Area's capital budget for the purchase of electric metering equipment along with installation of revenue metering at the gate stations.
6-41	Contributions in Aid of Construction	Contributions in aid of construction are the donations or contributions of cash, services, or property from states, municipalities, or other governmental agencies, individuals, and others for construction purposes.

General Plant

6-42	Buildings and Structures	Please see Appendix 9-2 through 9-7.
6-43	Security Automation	Please see Appendix 9-8.
6-44	Land Purchase	Please see Appendix 9-1.
6-45	Fleet Capital Power Operated	Please see Appendix 9-9.
6-46	Transportation Equipment	Please see Appendix 9-10.
6-47	Tools & Equipment	No expenditures planned for the 2022 budget year.
6-48	Lab & Test	Please see Appendix 9-12.
6-49	Communication Equipment	Please see Appendix 9-11.
6-50	Communication Towers	Please see Appendix 9-13.
6-51	Telecommunication Network	Please see Appendix 9-14 through 9-20.
6-52	Utility Monitoring	Please see Appendix 9-21.
6-53	Customer Information System Development	Please see Appendix 10-1 through 10-11.
6-54	Business Continuity	Please see Appendix 10-12.
6-55	Data Processing Equipment	Please see Appendix 10-13 through 10-22.
6-56	IS/IT Projects	No expenditures planned for the 2022 budget year.
6-57	Contingency Fund	Please see Appendix 10-23.
6-58	Delayed Cost Allocations	These are funds budgeted in the current year for items that may arrive late from the previous year's budget.

NOTES FOR PAGE 7-CAPITAL EXPENDITURES BUDGET

Substation & Transmission**Substation**

7-1	Install Substation 83 161/23kV Facilities	Description/Location	Various locations
		Purpose/Necessity	Substation 83 161/23kV Facilities build
7-2	FedEx Substation	Description/Location	Fedex Substation build
		Purpose/Necessity	Fedex Substation build
7-3	Replace RTU's various locations	Description/Location	Replace RTU's various locations
		Purpose/Necessity	Replace failed breakers
7-4	TVA CC Plant/Allen Substation 69 Improvements	Description/Location	TVA CC Plant/Allen Substation
		Purpose/Necessity	Improvements
7-5	Replace relays various locations	Description/Location	Replace capacitor various locations
		Purpose/Necessity	Replace failed breakers
7-6	AC Service for Breaker Storage Yard @ Substation 33	Description/Location	AC Service for Breaker Storage Yard
		Purpose/Necessity	Substation 33
7-7	Replace capacitor banks various locations	Description/Location	Replace capacitor banks various locations
		Purpose/Necessity	Replace failed breakers
7-8	Install SATEC Metering at Various Substations (Distribution Automation)	Description/Location	Various locations
		Purpose/Necessity	Install SATEC Metering
7-9	Refurbish Station Service, Transformer Storage AC, Power & Lighting	Description/Location	Substation
		Purpose/Necessity	Refurbish Station Service, Transformer Storage AC, Power & Lighting
7-10	Replace batteries various locations	Description/Location	Replace batteries various locations
			Replace batteries various locations
7-11	Seismic Retrofit of Substation 8 Transformer Foundation & Oil Spill Containment	Description/Location	Substation 8
		Purpose/Necessity	Nonstructural anchorage, bracing or restraints for nonstructural control and metering equipment in substation control and oil buildings and in the electric operations/SCADA building. (2007 Multi-Hazard Risk Assessment)
7-12	Refurbish Station Service & AC Panelboards @ Substation 34	Description/Location	Refurbish Station Service & AC Panelboards @ Substation 34
		Purpose/Necessity	Substation 34
7-13	Replace Reactor Substation 1	Description/Location	Substation 1
		Purpose/Necessity	Replace Reactor
7-14	Implement Breaker Fail Scheme @ Substation 34	Description/Location	Substation 34
		Purpose/Necessity	Implement Breaker Fail Scheme
7-15	Replace 161kV Potential Transformer @ Substation 32	Description/Location	Substation 32
		Purpose/Necessity	Replace 161kV Potential Transformer
7-16	Substation 4 OH/UG Conversion Ckts 2395 & 2397 (City of Memphis)	Description/Location	Substation 4
		Purpose/Necessity	OH/UG Conversion Ckts 2395 & 2397 (City of Memphis)
7-17	Replace 161kV CVT @ Substation 42	Description/Location	Substation 42
		Purpose/Necessity	Replace 161kV CVT
7-18	Monitoring	Description/Location	Substation
		Purpose/Necessity	Monitoring
7-19	Install TRV Capacitors	Description/Location	Various locations
		Purpose/Necessity	Install new TRV Capacitors
7-20	Contingency Replace Switches	Description/Location	Various locations
		Purpose/Necessity	Replace switches
7-21	Install JPAX Nodes to Upgrade JMUX SONET Nodes	Description/Location	Substation
		Purpose/Necessity	Install JPAX nodes to Upgrade JMUX SONET Nodes
7-22	Other Miscellaneous Replace/Install	Description/Location	Substation
		Purpose/Necessity	Other Miscellaneous Replace/Install

NOTES FOR PAGE 7-CAPITAL EXPENDITURES BUDGET (Continued)

7-23	Seismic Retrofit of Non-Structural Substation Components	Description/Location	Various locations
		Purpose/Necessity	Nonstructural anchorage, bracing or restraints for nonstructural control and metering equipment in substation control and oil buildings and in the electric operations/SCADA building. (2007 Multi-Hazard Risk Assessment)
7-24	Install Substation 89 11/23kV transformer	Description/Location	Substation 89
		Purpose/Necessity	Install 161/23kV transformer

Substation - NERC Compliance

7-25	Install/Upgrade Digital Fault Recorders	Description/Location	Install/Upgrade Digital Fault Recorders
		Purpose/Necessity	Needed for disturbance recording due to NERC standard PRC-002.

Substation Transformers

7-26	Replace 23/12 kV transformer banks 5335 & 5337 @ Substation 5	Description/Location	Substation 5
		Purpose/Necessity	Upgrade/update of existing aging infrastructure that is no longer adequate
7-27	Replace 115/12kV transformer banks 6555, 6557 & 6559 @ Substation 6	Description/Location	Substation 6
		Purpose/Necessity	Replacement of failed transformers at substations

Substation Circuit Breakers

7-28	Contingency Replace Breakers	Description/Location	Various substations
		Purpose/Necessity	Replace failed breakers
7-29	Replace 23 kV Breaker 7307 @ Substation 7	Description/Location	Replace 23 kV Breaker 7307 @ Substation 7
		Purpose/Necessity	Replace failed breakers
7-30	Replace 23 kV Breaker 45349 @ Substation 45	Description/Location	Replace 23 kV Breaker 45349 @ Substation 45
		Purpose/Necessity	Replace failed breakers
7-31	Replace 23 kV Breaker 4301 @ Substation 4	Description/Location	Replace 23 kV Breaker 4301 @ Substation 4
		Purpose/Necessity	Replace failed breakers
7-32	Replace 23 kV Breaker 1837 @ Substation 11	Description/Location	Replace 23 kV Breaker 1837 @ Substation 11
		Purpose/Necessity	Replace failed breakers
7-33	Replace 23 kV Breaker 1835 @ Substation 11	Description/Location	Replace 23 kV Breaker 1835 @ Substation 11
		Purpose/Necessity	Replace failed breakers
7-34	Replace 12 kV Breaker 7613 @ Substation 27	Description/Location	Replace 12 kV Breaker 7613 @ Substation 27
		Purpose/Necessity	Replace failed breakers
7-35	Replace 12 kV Breaker 6609 @ Substation 26	Description/Location	Replace 12 kV Breaker 6609 @ Substation 26
		Purpose/Necessity	Replace failed breakers
7-36	Replace 12 kV Breaker 6259 @ Substation 6	Description/Location	Replace 12 kV Breaker 6259 @ Substation 6
		Purpose/Necessity	Replace failed breakers
7-37	Replace 12 kV Breaker 6257 @ Substation 6	Description/Location	Replace 12 kV Breaker 6257 @ Substation 6
		Purpose/Necessity	Replace failed breakers
7-38	Replace 12 kV Breaker 38257 @ Substation 38	Description/Location	Replace 12 kV Breaker 38257 @ Substation 38
		Purpose/Necessity	Replace failed breakers
7-39	Replace 12 kV Breaker 3757 @ Substation 13	Description/Location	Replace 12 kV Breaker 3757 @ Substation 13
		Purpose/Necessity	Replace failed breakers
7-40	Replace 115 kV Breaker 5153 @ Substation 25	Description/Location	Replace 115 kV Breaker 5153 @ Substation 25
		Purpose/Necessity	Replace failed breakers

NOTES FOR PAGE 8-CAPITAL EXPENDITURES BUDGET

Substation/Transmission Projects (Continued)**Substation/Transmission Projects**

8-1	Structure #1613 Bank Stabilization (USACE Section 14 Funding)	Description/Location	Structure #1613 Bank Stabilization
		Purpose/Necessity	Bank Stabilization to prevent Tower #1613 from falling into Wolf River.
8-2	Misc. projects (OPGW, structure replacements, etc.)	Description/Location	Misc. projects (OPGW, structure replacements, etc.)
		Purpose/Necessity	Install small fiber communication jobs, structure replacements/upgrades and bank stabilization at various locations.
8-3	Sub 83 Cut-in	Description/Location	Substation 83
		Purpose/Necessity	Substation 83 Cut-in
8-4	OPGW 42-23	Description/Location	OPGW 42 - 23
		Purpose/Necessity	Install fiber communication between Substations 42 & 23.
8-5	OPGW 11-35	Description/Location	OPGW 11 - 35
		Purpose/Necessity	Install fiber communication between Substations 11 & 35.
8-6	LIDAR Survey Impacts (NERC)	Description/Location	LIDAR Survey Impacts (NERC)
		Purpose/Necessity	LIDAR Survey Impacts (NERC)

Transmission - Reimbursable

8-7	FedEx Station Transmission	Description/Location	FedEx Station Transmission
		Purpose/Necessity	FedEx Station Transmission
8-8	TVA CC Plant - Transmission Improvements	Description/Location	TVA CC Plant - Transmission Improvements
		Purpose/Necessity	Reimbursable improvements made at various locations as a result of the TVA CC Plant.
8-9	TVA CC Plant - Horn Lake Line Transmission Improvements	Description/Location	TVA CC Plant - Horn Lake Line Transmission Improvements
		Purpose/Necessity	Reimbursable improvements along the Horn Lake Line as a result of the TVA CC Plant.
8-10	TDOT Lamar & Shelby Drive	Description/Location	TDOT Lamar & Shelby Drive
		Purpose/Necessity	Lamar & Shelby Drive
8-11	Contribution In Aid of Construction - CIAC	Description/Location	Contribution In Aid of Construction - CIAC
		Purpose/Necessity	Contributions in aid of construction are the donations or contributions of cash, services, or property from states, municipalities, or other governmental agencies, individuals, and others for construction purposes.

Distribution System - Major Projects**New Circuits Out of Substations**

8-12	Sub 83 Ckt Ties	Description/Location	Install multiple circuit ties for station 83 circuits.
		Purpose/Necessity	Reliability and switching flexibility
8-13	Sub 84 Ckt Ties	Description/Location	Install multiple circuit ties for station 84 circuits.
		Purpose/Necessity	Reliability and switching flexibility
8-14	New Ckt Sub 84 North	Description/Location	Shelby Drive - Mendenhall to Hickory Hill & Holmes (Sub 89 Ckt Ties)
		Purpose/Necessity	Reliability and switching flexibility
8-15	Substation 83	Description/Location	Install multiple circuit ties for station 84 circuits.
		Purpose/Necessity	Reliability and switching flexibility
8-16	Other 2020-24 Projects	Description/Location	Shelby Drive Underbuilds - Germantown Rd to Hacks Cross (Sub to
8-17	Schilling Farms Circuit Ties (s)	Description/Location	Install multiple circuit ties for Schilling Farms circuits.
		Purpose/Necessity	Reliability and switching flexibility
8-18	Sub 84, Germantown Rd. Steel Pole Line	Description/Location	Install multiple circuits for substation 84 - Germantown Rd. Steel Pole Line
		Purpose/Necessity	Reliability and switching flexibility

Miscellaneous Reimbursable Projects

8-19	Pinch District Improvements	Description/Location	Downtown area
		Purpose/Necessity	This project will relocate/improve electric facilities in conjunction with the proposed improvements to the Pinch District in downtown Memphis.
8-20	Other Relocate at Customer Request Projects	Description/Location	Downtown area
		Purpose/Necessity	Relocating/improving electric facilities in conjunction with the proposed improvements in various areas at customers request.

NOTES FOR PAGE 8-CAPITAL EXPENDITURES BUDGET (Continued)

Street Improvement Projects

8-21	SR-4/US-78/Lamar, south of SR-175/Shelby Dr. to Raines/Perkins Interchange Phase 2	Description/Location	SR-4/US-78/Lamar, south of SR-175/Shelby Dr. to Raines/Perkins Interchange Phase 2
		Purpose/Necessity	Relocate utilities for proposed street improvement project by TDOT or municipalities
8-22	Elvis Presley Blvd. North and Middle Section	Description/Location	Eves Presley Corridor-North and Middle Section
		Purpose/Necessity	Relocate utilities for proposed street improvement project by TDOT or municipalities
8-23	SP 97-09 TDOT Summer Avenue	Description/Location	Summer Avenue
		Purpose/Necessity	SP 97-09 TDOT
8-24	Other Projections 2022-2025	Description/Location	Other Projections 2022-2025
		Purpose/Necessity	Relocate utilities for proposed street improvement project by TDOT or municipalities
8-25	I-240 at Airways Blvd.	Description/Location	I-240 at Airways Blvd.
		Purpose/Necessity	Relocate utilities for proposed street improvement project by TDOT or municipalities
8-26	SR-1/US-70/Summer Ave, from Macon Rd to Elmore Rd	Description/Location	SR-1/US-70/Summer Ave, from Macon Rd to Elmore Rd
		Purpose/Necessity	Relocate utilities for proposed street improvement project by TDOT or municipalities.
8-27	Holmes Road, Malone to US-78/Lamar (CP 04/38)	Description/Location	Holmes Road, Malone to US-78/Lamar (CP 04/38)
		Purpose/Necessity	Relocate utilities for proposed street improvement project by TDOT or municipalities
8-28	Germantown Road @Wolf River Blvd (GT 1601)	Description/Location	Germantown Rd. at Wolf River Blvd.
		Purpose/Necessity	Relocate utilities for proposed street improvement project by TDOT or municipalities
8-29	LL 09/02 - New Canada Rd. (Re-Alignment N of I-40 to US-70)	Description/Location	LL 09/02 - New Canada Rd. (Re-Alignment N of I-40 to US-70)
		Purpose/Necessity	Relocate utilities for proposed street improvement project by TDOT or municipalities
8-30	SR-14/Third Street bridge over Nonconnah Creek (SP 13/01)	Description/Location	SR-14/Third Street bridge over Nonconnah Creek (SP 13/01)
		Purpose/Necessity	Relocate utilities for proposed street improvement project by TDOT or municipalities
8-31	Sandbrook/Springbrook/Stonebrook/Coughlin	Description/Location	Sandbrook/Springbrook/ Stonebrook/Coughlin
		Purpose/Necessity	Relocate utilities for proposed street improvement project by TDOT or municipalities
8-32	SC 15/01: Walnut Gove, Houston Levee to Rocky Point	Description/Location	SC 15/01: Walnut Gove, Houston Levee to Rocky Point
		Purpose/Necessity	Relocate utilities for proposed street improvement project by TDOT or municipalities
8-33	Mudville Road Bridge, over Big Creek Proj.# 100111	Description/Location	Mudville Road Bridge, over Big Creek Proj.# 100111
		Purpose/Necessity	Relocate utilities for proposed street improvement project by TDOT or municipalities
8-34	Airways @ Ketchum (SP 11/07)	Description/Location	Airways @ Ketchum (SP 11/07)
		Purpose/Necessity	Relocate utilities for proposed street improvement project by TDOT or municipalities
8-35	New Allen @ Ridgemont - Round-about	Description/Location	New Allen @ Ridgemont - Round-about
		Purpose/Necessity	Relocate utilities for proposed street improvement project by TDOT or municipalities
8-36	Charles Bartlett Road - Culvert Replacement	Description/Location	Charles Bartlett Road - Culvert Replacement
		Purpose/Necessity	Relocate utilities for proposed street improvement project by TDOT or municipalities

NOTES FOR PAGE 9-CAPITAL EXPENDITURES BUDGET

General Plant**Buildings and Structures****Substations**

9-1	Purchase of Land	Description/Location	Land purchase or the acquisition of land rights for distribution and transmission line facilities.
		Purpose/Necessity	To accommodate electric facilities, transmission lines, feeder circuits, etc.
9-2	Replace Roofs - Various Substations	Description/Location	Various Substations
		Purpose/Necessity	This project was identified in the Master Roof Plan to be replaced at this time due to increased maintenance, potential leaking, and projected life expectancy.

Electrical & Systems Operations

9-3	UPS Battery Replacement	Description/Location	Required to replace approximately every five years due to cell degradation.
		Purpose/Necessity	This is a periodic upgrade to assure UPS system is reliable
9-4	New Storeroom Building	Description/Location	Needed to store special material purchased by the electric groups that are not
		Purpose/Necessity	New Storeroom Building
9-5	ESO - Drainage and pavement upgrade (Front of Bldg.)	Description/Location	To correct drainage and replace the asphalt drive.
		Purpose/Necessity	Repairs necessary due to an overflow of water from property upstream.

Netters Business Operations Center

9-6	Replace Five Liebert CRAC Units	Description/Location	Netters Business Operations Center
		Purpose/Necessity	Replace Five Liebert CRAC Units

New Buildings

9-7	Building Upgrades	Description/Location	Various locations
		Purpose/Necessity	Building Improvements
9-8	Security Automation	Description/Location	Various locations
		Purpose/Necessity	Install card readers on control house doors, install a CCTV system, install fence alarms and various security upgraded throughout the division.
		Purpose/Necessity	To purchase approved budget items, in order to provide equipment for crews to complete job assignments. Replacements are evaluated based on age, actual operational usage, projected usage, repair cost and frequency, parts availability, and effectiveness to meet areas needs. Additions are evaluated based on justification request and proper approval.

NOTES FOR PAGE 9—CAPITAL EXPENDITURES BUDGET (Continued)**General Plant (Continued)****Transportation Equipment**

9-10	Transportation Equipment	Description/Location	Division equipment used for work in and around Shelby County.
		Purpose/Necessity	To purchase approved budget items, in order to provide equipment for crews to complete job assignments. Replacements are evaluated based on age, actual operational usage, projected usage, repair cost and frequency, parts availability, and effectiveness to meet areas needs. Additions are evaluated based on justification request and proper approval.

Communication Equipment

9-11	Communication Equipment	Description/Location	Control Area for Communication Equipment
		Purpose/Necessity	To satisfy the Division needs for Electric Communication Equipment for the Budget. The replacement policy is broken down into the following categories: 1. Lost or Stolen; 2. Damaged Beyond Repair; 3. Not Repairable/No Abuse; 4. Obsolete

Laboratory & Test Equipment

9-12	Lab & Test Equipment	Description/Location	Control Area for Lab & Test Equipment
		Purpose/Necessity	To satisfy the Division needs for Electric Laboratory Equipment. The replacement policy is broken down into the following categories: 1. Lost or Stolen; 2. Damaged Beyond Repair; 3. Not Repairable/No Abuse; 4. Obsolete

Communication Tower Projects**Microwave/Mobile Radio**

9-13	Microwave/Mobile Radio	Description/Location	Reconfigure microwave loop for Netters radio tower
		Purpose/Necessity	Installation of Netters radio tower requires reconfiguration of microwave loop

NOTES FOR PAGE 9—CAPITAL EXPENDITURES BUDGET (Continued)

General Plant (continued)Telecom Network Projects**Fiber Optic Cable & Equipment**

9-14	DA Network Improvements	Description/Location	Memphis and Shelby County
		Purpose/Necessity	Installation of Distribution Automated Switches to improve responsiveness and aid in reducing customer minutes interrupted. Projected to install over 1100 automated distribution switches over a five year period.
9-15	Fiber Optic Multiplexers	Description/Location	Purchase and install fiber optic end equipment (places light on the optical fibers and "makes them work") at various locations.
		Purpose/Necessity	Enable communications over proposed fiber optic cable.
9-16	Fiber Optic Cable and Equipment	Description/Location	Install fiber optic cable at various locations.
		Purpose/Necessity	Provide fiber optic communications to specified facilities.
9-17	Smart Meter/SCADA Network Improvements	Description/Location	Smart Meter/SCADA Network Improvements
		Purpose/Necessity	To upgrade hardware/software
9-18	Telecommunications Systems Growth	Description/Location	Telecom systems growth - various locations. This is to cover unplanned and unforeseen Telecom expenditures that typically occur.
		Purpose/Necessity	Previous Telecom budgets had separate line items for systems growth in Mobile Radio, Fiber Optic, Microwave, Voice Recorder, Video Conferencing, Audio Conferencing, Voice System etc. This item consolidates the separate items.
9-19	TDOT Summer Avenue Project	Description/Location	Summer Avenue
		Purpose/Necessity	TDOT Project
9-20	Voice Network	Description/Location	Replace Administration Building telephone switch
		Purpose/Necessity	Replace obsolete switch; reconfigure voice system to have three "master" switches that provide service to all MLGW facilities instead of separate switches at each location.

Utility Monitoring & Control Systems

9-21	System Backup Control & Communication Plan (CO)	Description/Location	SCADA and CARES Systems long-term development
		Purpose/Necessity	Support long-term development of SCADA and CARES systems which involves implementation of backup system, upgrade of SCADA communications systems which includes relocating communication paths from ESO to fiber ring.

NOTES FOR PAGE 10—CAPITAL EXPENDITURES BUDGET

Customer Information System Development

10-1	Server Blade Chassis and Server Blade Replacement	Description/Location	Replace server hosting hardware
		Purpose/Necessity	Replace existing HPe C7000 Server Blade Chassis and HpeBL460 Generation 8 servers which have reached end of life and will not support current VMware versions.
10-2	Bill Gen Replacement	Description/Location	Replace the current BillGen system.
		Purpose/Necessity	GSA-3 customers may become Time Of Use (TOU) customers in October 2018. The current BillGen would not be able to handle these additional customers.
10-3	3G Meter Volume Corrector Communications Upgrade	Description/Location	3G Meter Volume Corrector Communications Upgrade.
		Purpose/Necessity	Upgrade Volume Correctors to 4G/5G communications on older smart meters.
10-4	Mobile Dispatching System Replacement (CO)	Description/Location	Mobile Dispatching System Replacement & Expansion
		Purpose/Necessity	Replace the mobile dispatch system which is several releases behind and does not allow for MLGW to develop its own functions within the software. Currently the vendor has to develop all functions.
10-5	CIS Production Hardware & Software Upgrade (C/O)	Description/Location	CIS Upgrade Production HW & SW
		Purpose/Necessity	This will provide an upgrade to the CIS hardware and software (Oracle Database 12c and Linux Operating system). The current hardware and software is over 8 years old.
10-6	Corporate Virtual Desktop Storage Replacement	Description/Location	Replace Virtual Desktop Storage
		Purpose/Necessity	Replace Virtual Desktop Storage
10-7	IVR and Call Center Expansion Project	Description/Location	The current IVR system does not allow MLGW to make its own changes. The vendor must make the changes to the IVR system. The new system would allow MLGW to make changes as needed to better meet customer needs and improve customer experience.
		Purpose/Necessity	To improve customer ease of use and experience.
10-8	Electric Meter Test Board Replacement (C/O)	Description/Location	The Electric Meter Area's capital budget for the purchase of electric metering equipment along with installation of revenue metering at the gate stations.
		Purpose/Necessity	Contributions in aid of construction are the donations or contributions of cash, services, or property from states, municipalities, or other governmental agencies, individuals, and others for construction purposes.
10-9	2FA Security Systems	Description/Location	Two-factor authentication system.
		Purpose/Necessity	The purpose of this project is to add multi-factor authentication requirements to access systems or networks required by regulatory agencies.
10-10	IVR Replacement (CO)	Description/Location	The current IVR system does not allow MLGW to make its own changes. The vendor must make the changes to the IVR system. The new system would allow MLGW to make changes as needed to better meet customer needs and improve customer experience.
		Purpose/Necessity	To improve customer ease of use and experience.
10-11	Meter Data Management System (CO)	Description/Location	The Meter Data Management (MDM) system is an application that provides analytical tools, reports, calculates billing reads, and time of use billing and reports.
		Purpose/Necessity	To implement a primary application for meter data management.

Business Continuity

10-12	2021 Virtual Backup System (CO)	Description/Location	Replace Virtual Storage Array
		Purpose/Necessity	Replace the existing Dell Compellent Storage Area Network (SAN) storage arrays for the virtual desktop environment.

Purchase of Data Processing Equipment

10-13	Annual Network Upgrade	Description/Location	Annual Network Upgrade
		Purpose/Necessity	To increase reliability and redundancy/failover of user access, applications and Customer satisfaction by adding additional network switches in the System Operations Data Center.
10-14	AI Project	Description/Location	Artificial Intelligence Project
		Purpose/Necessity	To increase reliability and redundancy/failover of user access, applications and Customer satisfaction by adding additional network switches in the System Operations Data Center.
10-15	Annual New/Replacement Servers-New	Description/Location	Annual New/Replacement Servers
		Purpose/Necessity	Purchase or replace existing servers which have reached end-of-life and will no longer be supported by the manufacturer.
10-16	Annual Network Upgrades-New	Description/Location	Perform Annual Network upgrades
		Purpose/Necessity	Purchase or replace existing servers which have reached end-of-life and will no longer be supported by the manufacturer.

NOTES FOR PAGE 10—CAPITAL EXPENDITURES BUDGET (Continued)

10-17	Network Access Control for End Points (C/O)	Description/Location	Network Access Control for End Points
		Purpose/Necessity	This system will provide continuous security monitoring and mitigation of devices that connect to MLGW's network. The system will discover, classify and assess every connected device for security threats and automatically take appropriate actions to mitigate or eliminate the risk posed by that device.
General Plant (continued)			
Purchase of Data Processing Equipment			
10-18	Project Portfolio Management Software (C/O)	Description/Location	Project Portfolio Management Tool.
		Purpose/Necessity	The system will centralize MLGW's project portfolio to provide the capability to organize and prioritize projects and align those projects with MLGW's strategic goals and objectives.
10-19	2020 Storage Upgrade (C/O)	Description/Location	Increase storage capacity
		Purpose/Necessity	To increase storage capacity, performance, and speed of MLGW's Storage Area Networks (SAN) which will accommodate the immense growth of the production, data, development and testing storage needs.
10-20	Work Center Wireless (outdoor) (C/O)	Description/Location	Work Center Wireless (outdoor)
		Purpose/Necessity	To expand MLGW's wireless outdoor network at North, South, Hickory Hill and Brunswick service centers.
10-21	EBS Succession Plan (C/O)	Description/Location	EBS Succession Plan
		Purpose/Necessity	This system will assist MLGW with business continuity and reduce the risks associated with talent mobility. It will enhance our ability to effectively balance career aspiration of the identified high potential employees and developing a stronger pipeline of probable successors transitioning into the organizations critically identified classifications.
10-22	PC Equipment	Description/Location	PC equipment (above \$5,000 unit cost) requested for various reasons
		Purpose/Necessity	PC equipment requested for various reasons including: additional functionality, laptops with docking stations to replace desktop PCs, and laptops needing replacement ahead of schedule due to software requirements.
10-23	Contingency Fund - General Plant	This is an estimated budget amount to cover unforeseen emergency items that may arise in the current year.	

NOTES FOR PAGE 12—INCOME & EXPENSE COMPARISON

Operating Revenue

12-1	Sales Revenue	This account includes projected revenue from the sale of natural gas to the residential, commercial, industrial, and interdepartmental customer classes.
12-2	Revenue Adjustment for Uncollectible	Per Governmental Accounting Standards Board (GASB) 34 requirements, bad debt expense must be shown as a reduction of revenue. This is the amount that will not be collected due to customers inability to pay.
12-3	Non-Sales Revenue	This account includes revenue from forfeited discounts (extra charges for payments received after net due date), plus rent charged for Gas Division property that is used by the Electric and Water Divisions, other miscellaneous revenue (e.g., fees for connecting/disconnecting service), and charges for transporting gas, CNG and LNG within the MLGW system for those industrial customers who arrange for purchase of their gas from suppliers other than MLGW.

Operating Expense

12-4	Production – LNG Plant	This account includes the cost of expenses incurred in the cost of fuel used in extracting salable products from natural gas and of operation of storage facilities and equipment.
12-5	Purchased Gas	This account includes the cost of natural gas and transportation of this gas to be used for injection into the system for resale.
12-6	Compressed Natural Gas (CNG)	This account includes the cost of compressed natural gas and transportation of this gas to be used for injection into the system for resale.
12-7	Liquefied Natural Gas (LNG)	This account includes the cost of liquefied natural gas and transportation of this gas to be used for injection into the system for resale.
12-8	Distribution Expense	This account includes the cost of labor and expenses incurred in the operation of the distribution system. Included are costs incurred in dispatching and controlling the supply and flow of the gas through the distribution system, in operating system mains and services, in operating general distribution measuring and regulating stations, and in removing, resetting, changing, testing, and servicing customer meters and house regulators. Also included in this account are the expenses incurred in work on customer premises, rents and other expenses.
12-9	Customer Accounts Expense	This account includes the cost of labor, materials and expenses used in work on customer applications, contracts, orders, credit investigations, billing and accounting, collections and complaints. It also includes meter reading expenses.
12-10	Customer Service and Information Expense	This account includes the cost of labor, materials and expenses incurred in providing instructions or assistance to customers, the object of which is to encourage safe, efficient, and economical use of services, and activities which convey information in utilizing services to protect health and safety, to encourage environmental protection, to use electrical equipment safely and economically and to conserve energy.
12-11	Sales Expense	This account includes the cost of labor, materials and expenses incurred in promotional, demonstrating and selling activities, advertising designed to promote or retain the use of utility services and miscellaneous sales expense. Included are exhibitions, displays, lectures, engineering and technical advice, advertising in newspapers, periodicals, billboards, radio, etc., postage on direct mail advertising, printing booklets, bulletins, etc.
12-12	Administrative and General Expense	This account includes the compensation of board members, executives, and other administrative and general employees of the utility not chargeable directly to a particular operating function. It also includes the cost of insurance to protect the utility against physical plant losses, cost of reserve accruals to protect the utility against injuries and damage claims of employees or others, such as liability, property damage, casualty, and employee liability. Employee pensions and benefits including payments to pension funds, life insurance, group medical expenses, payments for accident, sickness, hospital and death benefits, and expenses in connection with educational and wellness activities are also included in this account. In accordance with GASB 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other than Pension, MLGW must recognize all post-employment benefits, such as medical insurance and life insurance, when earned, effective budget year 2007.

Maintenance Expense

12-13	Production Expense	This account includes the cost of labor, materials and expenses incurred in the maintenance of liquefaction equipment, of measuring and regulating equipment, structures, station equipment and other equipment.
12-14	Distribution Expense	This account includes the cost of labor, materials and expenses incurred in the maintenance of distribution facilities, of structures, of distribution mains, of measuring and regulating equipment, of services, and of meters and house regulators.
12-15	Administrative and General Expense	Please see Appendix 12-12.

NOTES FOR PAGE 12-INCOME & EXPENSE COMPARISON (Continued)

Other Operating Expense

12-16	Depreciation Expense	The purpose of depreciation is to allocate the original cost of a fixed asset over its estimated useful life. In a utility environment, the annual depreciation rate also takes into account the estimated salvage and cost of removal upon retirement.
12-17	Payment in Lieu of Taxes	Payment in lieu of taxes is the amount paid to the municipalities in which MLGW has plant. The formula for payment in lieu of taxes is based on the Municipal Electric System Tax Equivalent Law of 1987 and the Municipal Gas Equivalent Law which became effective July 1, 1988. The tax
12-18	F.I.C.A. Taxes	This represents the 1.45% Medicare portion of Social Security Tax that is required to be paid on all MLGW employees hired after 03-31-1986.
12-19	Amortization of Leasehold Improvements	This account includes amortization charges related to expenditures on leased property where the service life of the improvements are terminable by action of the lease.
12-20	Amortization of Legacy Meters	This account includes amortization charges related to expenditures on meters.
12-21	Amortization of Software	This account includes amortization charges related to expenditures on software.

Income

12-22	Operating Income	Operating income is equal to operating revenue less total operating expense.
12-23	Other Income	This consists primarily of investment income and property rentals. It does not include any sales of electricity, gas or water.
12-24	Reduction of Plant Recovered through CIAC	Contributions in aid of construction are the donations or contributions of cash, services, or property from states, municipalities, or other governmental agencies, individuals, and others for construction purposes.

Debt Expense

12-25	Interest Expense -Long Term Debt	Anticipated bond interest payments per the bond debt schedules.
12-26	Amortization of Debt Discount & Expense	This represents the spreading of bond issuance costs over the life span of the bond series rather than recognizing such costs all at the time of sale.
12-27	Contributions in Aid of Construction	Contributions in aid of construction are the donations or contributions of cash, services, or property from states, municipalities, or other governmental agencies, individuals, and others for construction purposes.

NOTES FOR PAGE 13—SOURCES AND APPLICATION OF FUNDS

Source of Funds

13-1	Change in Net Position	Please see Budget page 13.
13-2	Depreciation Charged to Operating Income	Please see Appendix 13-2.
13-3	Depreciation Charged to Other Accounts	Depreciation charged to other accounts is the annual depreciation for transportation and power operated equipment. Depreciation on these plant items is charged to a clearing account and used
13-4	Amortization of Legacy Meters	Non-cash expense related to employee pension expenses above or below actual funding due to change in accounting principles.
13-5	Amortization of Software	Non-cash expense related to amortization charges related to software expenditures.
13-6	Salvage	Salvage is the amount received for property retired from plant in service. The property may be sold for scrap or returned to stores inventory for reuse.
13-7	Debt Issuance	Expected debt issuance in the Gas Division for the 2020 budget year.

Applications of Funds

13-8	Capital Expenditures	Please see Budget page 14.
13-9	Costs of Removal and Other Charges to the Reserve for Depreciation	Cost of removal is the cost associated with demolishing, dismantling, tearing down or otherwise removing utility plant, including the cost of transportation and labor.
13-10	Retirement of Long-Term Debt	Bond principal amounts due 01-01-2021 per the bond debt schedules are funded in equal monthly installments during 2021.

NOTES FOR PAGE 14—CAPITAL EXPENDITURES BUDGET

Production System

14-1	LNG Processing Facilities	LNG Processing Facilities- Purchase and installation of regeneration heating equipment,
------	----------------------------------	---

Distribution System

14-2	Apartments	This budget category provides for the expenses incurred by the Gas Division for developer requests for gas facilities located in a subdivision.
14-3	Residential Service in S/D	This budget category provides for the expenses incurred by the Gas Division for customer requests for service located in a subdivision.
14-4	Residential Service Not in S/D	This budget category provides for the expenses incurred by the Gas Division for customer requests for service not located in a subdivision.
14-5	Residential S/D	This budget category provides for the expenses incurred by the Gas Division for developer requests for gas facilities located in a subdivision.
14-6	Land Purchase	This budget category provides for the purchase of land rights that will be needed for Capital Budget Projects.
14-7	General Power Service	This budget category provides for the expenses incurred by the Gas Division for customer requests for new General Power Service.
14-8	General Power S/D	This budget category provides for the expenses incurred by the Gas Division for customer requests for new General Power Service located in a subdivision.
14-9	Multiple-Unit General Power	This budget category provides for the expenses incurred by the Gas Division for customer requests for multiple units of new General Power Service by the same customer and general location.
14-10	Relocate At Customer Request	This budget category provides for the expenses incurred by the Gas Division for customer requests to relocate existing gas facilities.
14-11	Purchase of Meters	This budget category provides for the expenses incurred from buying new gas meters and reconditioning existing gas meters.
14-12	Street Improvements	This budget category provides for the expenses incurred when City, State and Federal Street Improvements dictate that facilities must be relocated. Please see Appendix 16-1 through 16-11.
14-13	New Gas Main	This budget category provides for the expenses incurred for the installation of miscellaneous new gas mains and facilities.
14-14	Gas Main/Service Repl (D.O.T.)	This budget category provides for replacement of old cast iron main that requires excessive maintenance and that has a history of leaking. This is a 30 year project that began in 1991 and was requested by the TN Regulatory Authority to replace 330 miles. This budget category also provides for replacement of steel taps and associated services, if needed, that have a history of leaking. This is a program initiated by DIMP findings.
14-15	Transmission Pipelines and Facilities	This budget category provides for the expenses incurred for maintenance of cased gas transmission crossings required by regulatory changes, minor repair of transmission pipelines from scheduled inspections, and minor transmission improvements.
14-16	Regulator Stations	This budget line item provides for the expenses incurred from upgrading obsolete regulator station equipment. The DOT Code mandates that regulators must be maintained to operate within the design parameters of the gas distribution system.
14-17	Gate Stations	This budget line item provides for the expenses related to gas piping systems that are discovered to be unsafe due to corrosion defects, aged facilities, third party damages, or necessary relocations due to erosion problems for transmission as well as distribution.
14-18	Planned Maintenance	Construction in minor work that arises daily. These are mainly calls that go through the Control Room, to include pole knockdowns, gas, and water leaks, etc.
14-19	JT-Residential Service in S/D	This budget category provides for the expenses incurred by the Gas Division for customer requests for gas facilities in a joint trench subdivision.

Distribution System (Continued)

14-21	JT-Residential S/D	This budget category provides for the expenses incurred by the Gas Division for developer requests for gas facilities in a joint trench subdivision.
14-22	JT-Apartments	This budget category provides for the expenses incurred by the Gas Division for developer requests for gas facilities in a joint trench apartment development.
14-23	Emergency Maintenance	This budget line item provides for emergency repair work when leaks and cut facilities require immediate repair.
14-24	Demolition	No expenditures planned for the 2022 budget year.

NOTES FOR PAGE 14—CAPITAL EXPENDITURES BUDGET (Continued)

14-25	Contributions in Aid of Construction	This budget line item provides for the payment that was predicted to be received from the developer and/or customer for the requested gas facilities to serve their development, businesses and/or new
--------------	---	--

General Plant

14-26	Buildings and Structures	Please see Appendix 15-17 through 16-2.
14-27	Security Automation	Please see Appendix 16-3.
14-28	Purchase of Furniture & Fixtures	Please see Appendix 16-11
14-29	Data Processing	No expenditures planned for the 2021 budget year.
14-30	IS/IT Projects	Please see Appendix 16-9 through 16-10.
14-31	Fleet Capital Common Power Operated Equip	Please see Appendix 16-5.
14-32	Fleet Capital Common Transportation Equip	Please see Appendix 16-6.
14-33	Fleet Gas Power Operated Equipment	Please see Appendix 16-7.
14-34	Fleet Gas Transportation Equipment	Please see Appendix 16-8.
14-35	Tools & Equipment	Please see page 14.
14-36	Common Tools & Equipment	Please see page 14.
14-37	Miscellaneous Request-PPE	Please see page 14.
14-38	Contingency Funds	Please see page 14.
14-39	Delayed Cost Allocations	These are funds budgeted in the current year for items that may arrive late from the previous year's budget.

NOTES FOR PAGE 15-CAPITAL EXPENDITURES BUDGET

Production System

15-1	LNG Processing Facilities	Description/Location	Projects related to Capital Maintenance of the Capleville Liquefied Natural Gas Facility.
		Purpose/Necessity	Projects related to Capital Maintenance of the Capleville Liquefied Natural Gas Facility.

Distribution System- Major Projects

Street Improvements

15-2	Holmes Rd, Malone Rd to Lamar Ave.	Description/Location	Holmes Rd, Malone Rd to Lamar Ave.
		Purpose/Necessity	Expenses incurred when City, State and Federal Street Improvements dictate that facilities must be relocated for the drainage, elevation changes and/or new sewer facilities.
15-3	SP 97/09 TDOT Summer Avenue	Description/Location	Summer Avenue
		Purpose/Necessity	Expenses incurred when City, State and Federal Street Improvements dictate that facilities must be relocated for the drainage, elevation changes and/or new sewer facilities.
15-4	SP 03/10, SR-4/US-78 from MS State line to South of Shelby Drive.	Description/Location	MS State line to South of Shelby Drive.
		Purpose/Necessity	Expenses incurred when City, State and Federal Street Improvements dictate that facilities must be relocated for the drainage, elevation changes and/or new sewer facilities.
15-5	SC 15/01 Walnut Grove, Rocky Point-Houston Levee	Description/Location	Rocky Point-Houston Levee
		Purpose/Necessity	Expenses incurred when City, State and Federal Street Improvements dictate that facilities must be relocated for the drainage, elevation changes and/or new sewer facilities.
15-6	LL 09/02 Canada Rd, Re-Alignment, WO288164	Description/Location	Canada Road
		Purpose/Necessity	Expenses incurred when City, State and Federal Street Improvements dictate that facilities must be relocated for the drainage, elevation changes and/or new sewer facilities.
15-7	CP 05/15, Malone Rd, Holmes to Shelby	Description/Location	Holmes Rd to Shelby Drive
		Purpose/Necessity	Expenses incurred when City, State and Federal Street Improvements dictate that facilities must be relocated for the drainage, elevation changes and/or new sewer facilities.
15-8	CP 16/16 Elvis Presley Middle Seg, WO288159	Description/Location	Elvis Presley
		Purpose/Necessity	Expenses incurred when City, State and Federal Street Improvements dictate that facilities must be relocated for the drainage, elevation changes and/or new sewer facilities.
15-9	SP 06/07 I-55 Interchange@ Crump Blvd, W8P77381	Description/Location	I-55 Interchange at Crump Blvd.
		Purpose/Necessity	Expenses incurred when City, State and Federal Street Improvements dictate that facilities must be relocated for the drainage, elevation changes and/or new sewer facilities.
15-10	GT 16/01, Germantown Rd at Brierbrook, W8Q43005	Description/Location	Germantown Rd at Brierbrook
		Purpose/Necessity	Expenses incurred when City, State and Federal Street Improvements dictate that facilities must be relocated for the drainage, elevation changes and/or new sewer facilities.
15-11	SP 08/12 New Allen @ Ridgemont, WO467607	Description/Location	New Allen at Ridgemont
		Purpose/Necessity	Expenses incurred when City, State and Federal Street Improvements dictate that facilities must be relocated for the drainage, elevation changes and/or new sewer facilities.
15-12	CP 18/09 Bethel Grove Sewer Ext	Description/Location	Bethel Grove Sewer Ext

NOTES FOR PAGE 15-CAPITAL EXPENDITURES BUDGET (Continued)

		Purpose/Necessity	Expenses incurred when City, State and Federal Street Improvements dictate that facilities must be relocated for the drainage, elevation changes and/or new sewer facilities.
15-13	CP 20/07 Mysen @ Karstad, WO666987	Description/Location	Mysen at Karstad
		Purpose/Necessity	Expenses incurred when City, State and Federal Street Improvements dictate that facilities must be relocated for the drainage, elevation changes and/or new sewer facilities.
15-14	CP 04/39, Pleasant Hill Rd - Holmes to Shelby	Description/Location	Pleasant Hill Rd - Holmes to Shelby
		Purpose/Necessity	Expenses incurred when City, State and Federal Street Improvements dictate that facilities must be relocated for the drainage, elevation changes and/or new sewer facilities.

Transmission Pipelines and Facilities

15-15	12" XHP Brooks to McMullen	Description/Location	Brooks to McMullen
		Purpose/Necessity	Expenses incurred when City, State and Federal Street Improvements dictate that facilities must be relocated for the drainage, elevation changes and/or new sewer facilities.
15-16	18" XXHP Pipeline Replacement @ Covington Pike & LNRR	Description/Location	Covington Pike & LNRR
		Purpose/Necessity	Expenses incurred when City, State and Federal Street Improvements dictate that facilities must be relocated for the drainage, elevation changes and/or new sewer facilities.
15-17	Transmission Work	Description/Location	Transmission Work
		Purpose/Necessity	This budget line item provides for the expenses related to gas piping systems that are discovered to be unsafe due to corrosion defects, aged facilities, third party damages, or necessary relocations due to erosion problems for transmission as well as distribution.

NOTES FOR PAGE 15–CAPITAL EXPENDITURES BUDGET (Continued)

General Plant

Buildings and Structures

South Service Center

15-18	Paving Upgrade	Description/Location	South Service Center
		Purpose/Necessity	This project was identified in the Master Plan. All asphalt drives, parking areas are in very bad shape. Also, there is a need to pave areas for safe movement of material.

North Service Center

15-19	Building #8 (Re-cover over stores 160,668 square foot roof)	Description/Location	North Service Center
		Purpose/Necessity	All roof replacement projects are targeted in the Facilities master plan based on expected life expectancy and existing maintenance issues.
15-20	Asphalt Paving & Concrete Slabs/Drives Phase 2	Description/Location	North Service Center
		Purpose/Necessity	This project was identified in the Master Plan. All asphalt drives, parking
15-21	Building #8 (Re-cover over office 24,000 square foot roof)	Description/Location	North Service Center
		Purpose/Necessity	This project was recommended to store Building Services and Grounds' chemicals used for facility maintenance activities.
15-22	Concrete Pad for	Description/Location	Concrete Pad needed to relocate transformers to the new property north
		Purpose/Necessity	North Service Center
15-23	Bucket Truck & Testing Pad	Description/Location	New testing pad to be constructed at the North Service Center to replace the existing one located at Central Shops.
		Purpose/Necessity	North Service Center

Hickory Hill Service Center

15-24	Paving Upgrde	Description/Location	Hickory Hill Service Center
		Purpose/Necessity	All roof replacement projects are targeted in the Facilities master plan based on expected life expectancy and existing maintenance issues.

NOTES FOR PAGE 16–CAPITAL EXPENDITURES BUDGET

General Plant (Continued)

Buildings and Structures (Continued)

Choctaw

16-1	Security Fencing around	Description/Location	Choctaw
		Purpose/Necessity	Security Fencing around Choctaw and new property
16-2	Replace HVAC Roof-Top Units	Description/Location	Choctaw
		Purpose/Necessity	All roof replacement projects are targeted in the Facilities master plan based on expected life expectancy and existing maintenance issues.
16-3	Security Automation	Description/Location	Choctaw
		Purpose/Necessity	Security Automation
16-4	Tools & Equipment	Description/Location	Division tools/equipment used for work in and around Shelby County.
		Purpose/Necessity	To purchase approved budget items, in order to provide equipment for employees to complete job assignments. Tools are considered replacements for the following reasons: i. Damaged beyond repair; ii. Worn from time/age/use, cost does not justify repair; iii. Lost/Stolen report submitted in a timely manner; iv. No longer suited for work being done, replace with a new model; v. Safety hazard; vi. Repair cost is at or above 50% of cost of new tool; vii. High occurrence of maintenance that creates excessive downtime.
16-5	Tools & Equipment Common	Description/Location	Division tools/equipment used for work in and around Shelby County.
		Purpose/Necessity	To purchase approved budget items, in order to provide equipment for employees to complete job assignments. Tools are considered replacements for the following reasons: i. Damaged beyond repair; ii. Worn from time/age/use, cost does not justify repair; iii. Lost/Stolen report submitted in a timely manner; iv. No longer suited for work being done, replace with a new model; v. Safety hazard; vi. Repair cost is at or above 50% of cost of new tool; vii. High occurrence of maintenance that creates excessive downtime.
16-6	Fleet Capital Common Power Operated Equipment	Description/Location	Division vehicles/equipment used for work in and around Shelby County.
		Purpose/Necessity	To purchase approved budget items in order to provide equipment for crews to complete job assignments. Replacements are evaluated based on age, actual operational usage, projected usage, repair cost and frequency, parts availability, and effectiveness to meet areas' needs. Additions are evaluated based on justification request and proper approval.
16-7	Fleet Capital Common Transportation Equipment	Description/Location	Division vehicles/equipment used for work in and around Shelby County.
		Purpose/Necessity	To purchase approved budget items in order to provide equipment for crews to complete job assignments. Replacements are evaluated based on age, actual operational usage, projected usage, repair cost and frequency, parts availability, and effectiveness to meet areas' needs. Additions are evaluated based on justification request and proper approval.
16-8	Fleet Gas Power Operated Equipment	Description/Location	Division vehicles/equipment used for work in and around Shelby County.
		Purpose/Necessity	To purchase approved budget items in order to provide equipment for crews to complete job assignments. Replacements are evaluated based on age, actual operational usage, projected usage, repair cost and frequency, parts availability, and effectiveness to meet areas' needs. Additions are evaluated based on justification request and proper approval.
16-9	Fleet Gas Transportation Equipment	Description/Location	Division vehicles/equipment used for work in and around Shelby County.
		Purpose/Necessity	To purchase approved budget items in order to provide equipment for crews to complete job assignments. Replacements are evaluated based on age, actual operational usage, projected usage, repair cost and frequency, parts availability, and effectiveness to meet areas' needs. Additions are evaluated based on justification request and proper approval.

IS/IT Projects

16-10	Natural Gas Management System (CO)	Description/Location	Replace the Allegro Gas Management system with a new system.
		Purpose/Necessity	This system is needed for accurate and timely information of natural gas and derivatives, supplier and pipeline invoice reconciliation.
16-11	ETRM Phase 2 Project	Description/Location	Energy Trading and Risk Management
		Purpose/Necessity	Replace SCADA/CARES consoles

NOTES FOR PAGE 18—INCOME & EXPENSE COMPARISON

Operating Revenue

18-1	Sales Revenue	This account includes projected revenue from the sale of water to the residential, commercial, resale, and interdepartmental customer classes, as well as revenue from fire protection services.
18-2	Revenue Adjustment for Uncollectible	Per Governmental Accounting Standards Board (Water) 34 requirements, bad debt expense must be shown as a reduction of revenue. This is the amount that will not be collected due to customers inability to pay.
18-3	Non-Sales Revenue	This account includes revenue from forfeited discounts (charges for payments received after net due date), plus rent charged for Water Division property that is used by the Electric and Water Divisions, and other miscellaneous revenue (e.g., fees for connecting/disconnecting service).

Operating Expense

18-4	Production Expense	This account includes the cost of labor and expenses incurred in the general supervision and operation of the water source of supply facilities, the power production and pumping facilities, and the water treatment expenses. Also included is the fuel used in the production of power to operate the pumps, all chemicals used in the treatment of water and miscellaneous expenses including general clerical labor, building services, general operating supplies and care of grounds.
18-5	Distribution Expense	This account includes the cost of labor and expenses incurred in the operation of distribution reservoirs and tanks, meter expenses, customer installation expenses and miscellaneous expenses including preparing maps and prints, general clerical support, operating records, service interruption, trouble records, and other miscellaneous labor.
18-6	Customer Accounts Expense	This account includes the cost of labor and expenses incurred in the reading of customer meters, in customer applications, orders, contracts, credit investigations, billing and accounting, collections and complaints.
18-7	Customer Service and Information Expense	This account includes the cost of labor and expenses incurred in customer service and informational activities, the purpose of which is to encourage safe and efficient use of the utility's services, to promote the conservation of the utility's services and to assist customers in answering specific inquiries as to the proper and economic use of the utility's services.
18-8	Sales Expense	This account includes the cost of labor, materials and expenses incurred in promotional, demonstrating and selling activities, advertising designed to promote or retain the use of utility services and miscellaneous sales expense. Included are exhibitions, displays, lectures, engineering and technical advice, advertising in newspapers, periodicals, billboards, radio, etc., postage on direct mail advertising, printing booklets, bulletins, etc.
18-9	Administrative and General Expense	This account includes the compensation of board members, executives, and other administrative and general employees of the utility not chargeable directly to a particular operating function. It also includes the cost of insurance to protect the utility against physical plant losses, cost of reserve accruals to protect the utility against injuries and damage claims of employees or others, such as liability, property damage, casualty, and employee liability. Employee pensions and benefits including payments to pension funds, life insurance, group medical expenses, payments for accident, sickness, hospital and death benefits, and expenses in connection with educational and wellness activities are also included in this account. In accordance with Water 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other than Pension, MLGW must recognize all postemployment benefits, such as medical insurance and life insurance, when earned, effective budget year 2007.

Maintenance Expense

18-10	Production Expense	This account includes the labor and expenses incurred in the maintenance of structures and improvements, collecting and impounding reservoirs, maintenance of wells, the maintenance of observation wells, the maintenance of structures and improvements used in connection with pumping, maintenance of power production equipment used directly in pumping operations, the maintenance of pumping equipment, maintenance of structures and improvements to the water treatment plant, and water treatment plant equipment.
18-11	Distribution Expense	This account includes the labor and expenses incurred in the maintenance of the distribution system including structures and improvements, mains, services, meters, meter testing equipment, fire hydrants, and miscellaneous plant.
18-12	Administrative & General Expense	Please see Appendix 18-9.

NOTES FOR PAGE 18—INCOME & EXPENSE COMPARISON (Continued)

Other Operating Expense

18-13	Depreciation Expense	The purpose of depreciation is to allocate the original cost of a fixed asset over its estimated useful life. In a utility environment, the annual depreciation rate also takes into account the estimated salvage and cost of removal upon retirement.
18-14	Payment In Lieu of Taxes	MLGW and the City of Memphis have agreed on a P.I.L.O.T. in the amount of \$2,500,000 to be made on an annual basis to the City from the revenues of the Water Division through fiscal years 2028.
18-15	F.I.C.A. Taxes	This represents the 1.45% Medicare portion of Social Security Tax that is required to be paid on all MLGW employees hired after 03-31-1986.
18-16	Amortization of Legacy Meters	This account includes amortization charges related to expenditures on meters.

Income

18-17	Operating Income	Operating income is equal to operating revenue less total operating expense.
18-18	Other Income	This consists primarily of interest and investment income. It does not include any sales of electricity, gas or water.
18-19	Reduction of Plant Recovered through CIAC	Contributions-in-aid-of-construction are the donations or contributions of cash, services, or property from states, municipalities, or other governmental agencies, individuals, and others for construction purposes.

Debt Expense

18-20	Interest Expense – Existing Long-Term Debt	Bond interest payments due 06-01-2021 and 12-01-2021 per the bond debt schedules are funded in equal monthly installments in 2021.
18-21	Amortization of Debt Discount & Expense	This represents the spreading of bond issuance costs over the life span of the bond series rather than recognizing such costs all at the time of sale.
18-22	Contributions in Aid of Construction	Please see Appendix 18c.

NOTES FOR PAGE 19—INCOME & EXPENSE COMPARISON

Source of Funds

19-1	Change in Net Position	Please see page 19.
19-2	Depreciation Charged to Operating Income	Please see page 19.
19-3	Depreciation Charged to Other Accounts	Depreciation charged to other accounts is the annual depreciation for transportation and power operated equipment. Depreciation on these plant items is charged to a clearing account and used in the equipment rate calculations.
19-4	Amortization of Legacy Meters	Non-cash expense related to employee pension expenses related to meter expenditures.
19-5	Salvage	Salvage is the amount received for property retired from plant in service. The property may be sold for scrap or returned to stores inventory for reuse.
19-6	Debt Issuance	Expected debt issuance in the Water Division for the 2022 budget year.

Application of Funds

19-7	Capital Expenditures	Please see Budget page 19.
19-8	Costs of Removal and Other Charges to the Reserve for Depreciation	Cost of removal is the cost associated with demolishing, dismantling, tearing down or otherwise removing utility plant, including the cost of transportation and labor.
19-9	Retirement of Long-Term Debt	Bond principal amounts due 12-01 per the bond debt schedules are funded in equal monthly installments during 2020.

NOTES FOR PAGE 20–CAPITAL EXPENDITURES BUDGET

Production System

20-1	Pumping Stations	Please see Appendix 21-1 through 22-2.
20-2	Overhead Storage Tanks	No expenditures planned for the 2022 budget year.
20-3	Underground Storage Reservoirs	Please see Appendix 22-3 through 22-4.
20-4	Production Wells	Please see Appendix 22-5 through 22-9.
20-5	Land Purchase	Please see Appendix 22-11.
20-6	Operations Maintenance	Please see Appendix 22-10.
20-7	Contingency Fund - Production	Please see Appendix 22-17.
20-8	Buildings and Structures - Production System	Please see Appendix 22-13 through 22-16.

Distribution System

20-9	Residential Service in S/D	This budget category provides for the expenses incurred by the Water Division for customer
20-10	Residential Service not in S/D	This budget category provides for the expenses incurred by the Water Division for customer requests for service not located in a subdivision.
20-11	Residential S/D	This budget category provides for the expenses incurred by the Water Division for developer requests for Water facilities located in a subdivision.
20-12	Apartments	This budget category provides for the expenses incurred by the Water Division for developer requests for Water facilities for new apartment developments.
20-13	General Power Service	This budget category provides for the expenses incurred by the Water Division for customer
20-14	Relocate At Customer Request	This budget category provides for the expenses incurred to relocate at the customer's request.
20-15	Street Improvements	This budget category provides for the expenses incurred when City, State and Federal Street Improvements dictate that facilities must be relocated. Please see Appendix 25-9 through 25-14.
20-16	New Water Main	This budget category provides for the expenses incurred for the installation of miscellaneous new water mains and facilities.
20-17	Lead Service Replacement	Replace lead services with copper at known locations throughout Shelby County.
20-18	Purchase of Meters	The number of meters purchased is based on projections for the coming year. These meters include meters that will be paid for by customer contributions relating to new residential and commercial development and replacement of existing meters.
20-19	Planned Maintenance	Construction in minor work that arises daily. These are mainly calls that go through the Control Room, to include pole knockdowns, gas, and water leaks, etc.
20-20	Emergency Maintenance	This budget line item provides for emergency repair work when leaks and cut facilities require immediate repair.
20-21	Contributions in Aid of Construction	Contributions in aid of construction are the donations or contributions of cash, services, or property from states, municipalities, or other governmental agencies, individuals, and others for construction purposes.

General Plant

20-22	Buildings and Structures	None budgeted for the 2022 Budget Year.
20-23	Security Automation	Please see Appendix 23-16.
20-24	Fleet Capital Power Operated Equip	Please see Appendix 23-17.
20-25	Fleet Capital Water Transportation Equip	Please see Appendix 23-18.
20-26	IS/IT Projects Water	Please see Appendix 23-15.
20-27	Lab Equipment	None budgeted for the 2022 Budget Year.
20-28	Tools and Equipment	
20-29	Contingency Fund	This is an estimated budget amount to cover unforeseen emergency items that may arise in the current year. See Appendix 23-19.
20-30	Delayed Cost Allocations	These are funds budgeted in the current year for items that may arrive late from the previous year's budget.

NOTES FOR PAGE 21–CAPITAL EXPENDITURES BUDGET

Production System
Pumping Stations

Allen Pumping Station

21-1	Station Rehabilitation	Description/Location	The purchase and installation of replacement valves, piping, hardware, meters, actuators, etc.... Rehabilitation of concrete structural components. Allen Pumping Station
		Purpose/Necessity	The existing infrastructure can no longer be operated safely or reliably.
21-2	Medium Voltage Breaker & Switchgear Replacements (CO)	Description/Location	Design, purchase and installation of the 12kV and 5 kV circuit breakers/Switchgear at Allen Pumping Station
		Purpose/Necessity	Parts for the existing 12kV and 5 kV Circuit Breakers are unavailable and there are safety concerns related to the existing breakers
21-3	Generator Replacement	Description/Location	Design, Construction Administration and Integration needed to replace the existing distributed process control system.
		Purpose/Necessity	The existing generator is old and has frequent downtime. Generator uptime is needed when storms/power outages exist.
21-4	Dedicated Well Electric Circuit Replacement	Description/Location	Dedicated Well Electric Circuit Replacement
		Purpose/Necessity	The existing underground electric loop for the Allen wells is currently not reliable and causes well downtime. Moving the wells to overhead electric will make wells more reliable.
21-5	Install Distributed Process Control System Replacement	Description/Location	Install Distributed Process Control System Replacement
		Purpose/Necessity	The existing DPC system is outdated and parts can no longer be obtained for the existing controller. This is needed for regulatory compliance with Tennessee Department of Environment and Conservation standards.

Davis Pumping Station

21-6	VFD, Motor & Transformer Replacements	Description/Location	Design, Construction Administration and Integration needed to replace high service pump drive equipment.
		Purpose/Necessity	The existing VFD's chronically overheat and replacement parts are unavailable when the VFD's fail.
21-7	Station Rehabilitation (CO)	Description/Location	The purchase and installation of replacement valves, piping, hardware, meters, actuators, etc.... Rehabilitation of concrete structural components at Davis Pumping Station
		Purpose/Necessity	The existing infrastructure can no longer be operated safely or reliably.

Lichterman Pumping Station

21-8	Install Distributed Process Control System Replacement	Description/Location	Design, Construction Administration and Integration needed to replace the existing distributed process control system.
		Purpose/Necessity	The existing DPC system is outdated and parts can no longer be obtained for the existing controller. This is needed for regulatory compliance with Tennessee Department of Environment and Conservation standards.

NOTES FOR PAGE 21–CAPITAL EXPENDITURES BUDGET (Continued)

21-9	Engineer Distributed Process Control System Replacement	Description/Location	Design, Construction Administration and Integration needed to replace the existing distributed process control system.
		Purpose/Necessity	The existing DPC system is outdated and parts can no longer be obtained for the existing controller. This is needed for regulatory compliance with Tennessee Department of Environment and Conservation standards.

Production System (Continued)

Pumping Stations (Continued)

Mallory Pumping Station

21-10	VFD, Motor & Transformer Replacements	Description/Location	Design, Construction Administration and Integration needed to replace high service pump drive equipment.
		Purpose/Necessity	The existing VFD's chronically overheat and replacement parts are unavailable when the VFD's fail.
21-11	Generator Replacement (CO)	Description/Location	Design, Construction Administration and Integration needed to replace the existing distributed process control system.
		Purpose/Necessity	The existing generator is old and has frequent downtime. Generator uptime is needed when storms/power outages exist.
21-12	Filter Media Replacement (CO)	Description/Location	Design, Construction Administration and Integration needed to replace filter media at Mallory Pumping Station
		Purpose/Necessity	The existing filter media is old and needs to be replaced. Filter media should be replaced every 15-20 years.

McCord Pumping Station

21-13	VFD, Motor & Transformer Replacements	Description/Location	Design, Construction Administration and Integration needed to replace high service pump drive equipment.
		Purpose/Necessity	The existing VFD's chronically overheat and replacement parts are unavailable when the VFD's fail.

NOTES FOR PAGE 21—CAPITAL EXPENDITURES BUDGET (Continued)

Morton Pumping Station

21-14	VFD, Motor, Transformer Replacements	Description/Location	Design, Construction Administration and Integration needed to replace high service pump drive equipment.
		Purpose/Necessity	The existing VFD's chronically overheat and replacement parts are unavailable when the VFD's fail.
21-15	Install Distributed Process Control System Replacement	Description/Location	Install Distributed Process Control System Replacement.
		Purpose/Necessity	The existing DPC system is outdated and parts can no longer be obtained for the existing controller. This is needed for regulatory compliance with Tennessee Department of Environment and Conservation standards.
21-16	Engineer Distributed Process Control System Replacement	Description/Location	Design, Construction Administration and Integration needed to replace the existing distributed process control system.
		Purpose/Necessity	The existing DPC system is outdated and parts can no longer be obtained for the existing controller. This is needed for regulatory compliance with Tennessee Department of Environment and Conservation standards.

Palmer Pumping Station

21-17	Engineer Distributed Process Control System Replacement	Description/Location	Design, Construction Administration and Integration needed to replace the existing distributed process control system.
		Purpose/Necessity	The existing DPC system is outdated and parts can no longer be obtained for the existing controller. This is needed for regulatory compliance with Tennessee Department of Environment and Conservation standards.
21-18	Install Distributed Process Control System Replacement	Description/Location	Install Distributed Process Control System Replacement.
		Purpose/Necessity	The existing DPC system is outdated and parts can no longer be obtained for the existing controller. This is needed for regulatory compliance with Tennessee Department of Environment and Conservation standards.

Production System (Continued)

Pumping Stations (Continued)

Shaw Pumping Station

21-19	VFD, Motor, Transformer Replacements	Description/Location	Design, Construction Administration and Integration needed to replace the existing distributed process control system.
		Purpose/Necessity	The existing DPC system is outdated and parts can no longer be obtained for the existing controller. This is needed for regulatory compliance with Tennessee Department of Environment and Conservation standards.

Sheehan Pumping Station

21-20	Station Rehabilitation (CO)	Description/Location	The purchase and installation of replacement valves, piping, hardware, meters, actuators, etc.... Rehabilitation of concrete structural components at Davis Pumping Station
		Purpose/Necessity	The existing infrastructure can no longer be operated safely or reliably.

Pickel Pumping Station

21-21	Engineer Water Treatment Plant	Description/Location	The purchase and installation of replacement valves, piping, hardware, meters, actuators, etc.... Rehabilitation of concrete structural components at Davis Pumping Station
		Purpose/Necessity	The existing infrastructure can no longer be operated safely or reliably.

NOTES FOR PAGE 22-CAPITAL EXPENDITURES BUDGET

Production System (Continued)

Pumping Stations (Continued)

Miscellaneous Pumping Facilities

22-1	Water Operations Capital Items (CO)	Description/Location	This item is to account for unplanned Capital Items. / As-needed
		Purpose/Necessity	This is a projected budget amount to cover unforeseen Capital Items in the current year due to mechanical/electrical/etc. failure. / When equipment breaks, it must be fixed.
22-2	Engineering Services Contract (CO)	Description/Location	Engineering Consultants on an "as-needed" basis. / As-needed.
		Purpose/Necessity	Water E&O has a need to retain Engineering Consultants on an "as-needed" basis. / Water Engineering does not have the expertise to perform certain engineering functions.
Underground Storage Reservoirs			
Mallory Pumping Station			
22-3	Construct Wash Water Recovery Basin Replacement	Description/Location	Construction of WWRB at Mallory Pumping Station
		Purpose/Necessity	The existing WWRB is the retrofitted Equalizing Basin. The operational performance of the existing WWRB is very poor. There are regulatory issues with the existing WWRB.
Sheehan Pumping Station			
22-4	Engineer Wash Recovery Basin Replacement	Description/Location	Construction of WWRB at Sheehan Pumping Station
		Purpose/Necessity	The existing WWRB is the retrofitted Equalizing Basin. The operational performance of the existing WWRB is very poor. There are regulatory issues with the existing WWRB.
Production Wells			
Mallory Pumping Station			
22-5	Construct/Replace Well	Description/Location	Construction of a large water production well at Mallory Pumping Station.
		Purpose/Necessity	A number of the Mallory wells need to be replaced.
Morton Pumping Station			
22-6	Construct/Replace Well	Description/Location	Construction of a large water production well. Morton Pumping Station
		Purpose/Necessity	A number of the Morton wells need to be replaced.
Sheehan Pumping Station			
22-7	Construct/Replace Well	Description/Location	Construction of a large water production well. Sheehan Pumping Station
		Purpose/Necessity	A number of the Sheehan wells need to be replaced.
22-8	Well Failures	Description/Location	Construction of a large water production well. Various pumping station.
		Purpose/Necessity	Water production wells fail unexpectedly and need to be replaced.
22-9	Abandon Wells	Description/Location	To abandon water production wells that have reached the end of life.
		Purpose/Necessity	Well abandonment is needed to drill second generation wells on the same well site.
Operations Maintenance			
22-10	Operations Maintenance	Description/Location	maintenance necessary for the continuation of normal operations
		Purpose/Necessity	maintenance necessary for the continuation of normal operations
Land Purchase			
22-11	Land Purchase	Description/Location	Purchase water production well lots/Various locations.
		Purpose/Necessity	Well lots are needed to install new/replacement water production wells to provide an adequate source water supply for customers.

NOTES FOR PAGE 22-CAPITAL EXPENDITURE BUDGET (Continued)

Buildings and Structures

McCord Pumping Station

22-12	Aerator Bldg: Replace Roof (6825 sf)	Description/Location	McCord Pumping Station
		Purpose/Necessity	This project is needed to replace the Aerator roof. The existing roof system is past it's life expectancy and is getting frequent leak repair request.
22-13	Reroof Main Building (15930 sf)	Description/Location	McCord Pumping Station
		Purpose/Necessity	This project is needed to replace the Main Pump building roof. The existing roof system is past it's life expectancy and is getting frequent leak repair requests.
<u>Davis Pumping Station</u>			
22-14	Replace roof - 14,100 sf	Description/Location	Davis Pumping Station
		Purpose/Necessity	This project is needed to replace the Main Pump building roof. The existing roof system is past it's life expectancy and is getting frequent leak repair requests.
<u>Lichterman Pumping Station</u>			
22-15	Aerator Bldg: Replace Roof	Description/Location	Lichterman Pumping Station
		Purpose/Necessity	This project is needed to replace the Main Pump building roof. The existing roof system is past it's life expectancy and is getting frequent leak repair requests.
<u>Water Lab</u>			
22-16	Replace emergency generator	Description/Location	Water Lab
		Purpose/Necessity	This project is needed to replace the existing emergency generator which is way past it's life expectancy. It is original to the building and is becoming more unreliable. The new generator and tank will be seismic rated and will be relocated closer to the building.
<u>Contingency Fund</u>			
22-17	Contingency Funds	This is an estimated budget amount to cover unforeseen emergency items that may arise in the current year.	

NOTES FOR PAGE 23-CAPITAL EXPENDITURES BUDGET

23-1	Collecting Main Installation	Description/Location	Various locations
		Purpose/Necessity	The ties bring water from the aquifer to the plant.
23-2	Main Replacement Projects	Description/Location	Older cast iron mains in older parts of town sometimes break several times and it is more feasible to replace the main.
		Purpose/Necessity	Older cast iron mains in older parts of town sometimes break several times and it is more feasible to replace the main.
23-3	Large Main Extensions	Description/Location	Large Main Extensions
		Purpose/Necessity	Provides more water to parts of Shelby County where there is a need or future need to more water.
23-4	Miscellaneous Projects - Reimbursable	Description/Location	This line item covers former SCBPU projects aimed at improving the Distribution System in former SCBPU areas of the county. These projects mostly center around improvements in the Shelby Forest area.
		Purpose/Necessity	This line item covers former SCBPU projects aimed at improving the Distribution System in former SCBPU areas of the county.
23-5	Major Valve Replacements/Additions	Description/Location	The project will involve the replacement and additions of 12" and larger valves
		Purpose/Necessity	Replacement of non-functioning and key valves and adding strategically place valves on primary and secondary feeders to optimize the ability to isolate large mains while minimizing the number of cut off customers
23-6	Miscellaneous Projections	Description/Location	Miscellaneous Projections
		Purpose/Necessity	MLGW will meet the utility relocation needs of the City, County, and State for their street improvement projects.
23-7	Minor System Improvements	Description/Location	Minor System Improvements to Water Distribution System
		Purpose/Necessity	Minor System Improvements to Water Distribution System.

Distribution System

Street Improvements

23-8	TDOT Projects	Description/Location	These are street improvement projects done by TDOT requiring the relocation of MLGW water mains.
		Purpose/Necessity	MLGW will meet the utility relocation needs of the City, County, and State for their street improvement projects.
23-9	City of Lakeland Projects	Description/Location	These are street improvement projects done by the City of Lakeland requiring the relocation of MLGW water mains.
		Purpose/Necessity	MLGW will meet the utility relocation needs of the City, County, and State for their street improvement projects.
23-10	City of Memphis Projects	Description/Location	These are street improvement projects done by the City of Memphis requiring the relocation of MLGW water mains.
		Purpose/Necessity	MLGW will meet the utility relocation needs of the City, County, and State for their street improvement projects.
23-11	Shelby County Projects	Description/Location	These are street improvement projects done by Shelby County requiring the relocation of MLGW water mains.
		Purpose/Necessity	MLGW will meet the utility relocation needs of the City, County, and State for their street improvement projects.
23-12	City of Bartlett Projects	Description/Location	These are street improvement projects done by the City of Bartlett
		Purpose/Necessity	MLGW will meet the utility relocation needs of the City, County, and State for their street improvement projects.
23-13	Miscellaneous Projections	Description/Location	Miscellaneous Projections
		Purpose/Necessity	MLGW will meet the utility relocation needs of the City, County, and State for their street improvement projects.

Lead Replacement

23-14	Lead Replacement	Description/Location	Lead Replacement
		Purpose/Necessity	Lead Replacement

NOTES FOR PAGE 23-CAPITAL EXPENDITURES BUDGET (Continued)

General Plant

IS/IT Project

23-15	Laboratory Information Management System Replacement	Description/Location	Replace the current laboratory information management system
		Purpose/Necessity	State and Federal regulations are continually changing and the current system is limited, not very user friendly and cannot handle all of the regulatory requirements.
23-16	Security Automation	Description/Location	Various locations
		Purpose/Necessity	Install card readers on control house doors, install a CCTV system, install fence alarms and various security upgrades throughout the division
23-17	Fleet Capital Power Operated Equipment	Description/Location	Division vehicles/equipment used for work in and around Shelby County.
		Purpose/Necessity	To purchase approved budget items in order to provide equipment for crews to complete job assignments. Replacements are evaluated based on age, actual operational usage, repair cost and frequency, parts availability, and effectiveness to meet area's needs. Additions are evaluated based on justification request and proper approval.
23-18	Fleet Capital Transportation Equipment	Description/Location	Division vehicles/equipment used for work in and around Shelby County.
		Purpose/Necessity	To purchase approved budget items in order to provide equipment for crews to complete job assignments. Replacements are evaluated based on age, actual operational usage, repair cost and frequency, parts availability, and effectiveness to meet area's needs. Additions are evaluated based on justification request and proper approval.
23-19	Contingency Funds – General Plant	This is an estimated budget amount to cover unforeseen emergency items that may arise in the current year.	

(This Page Intentionally Left Blank)

GLOSSARY

ACD: Automatic Call Distributor.

ACSR: Aluminum, Cable Steel Reinforced cable.

ADA: Americans with Disabilities Act.

BNSF: Burlington Northern Santé Fe Railway Company.

BTU: British Thermal Unit.

Capital Budget: Fixed assets and capital projects to be acquired or contracted during the budget period.

Capital Expenditure: Expenditures that result in the acquisition of, or addition to, fixed assets including land, buildings, improvements, machinery, and equipment.

CA: Cab to Axle.

CARES: Computer Assisted Restoration of the Electric System.

CCTV: Closed-circuit television.

C&C: Cab and Chassis.

CC&C: Crew Cab & Chassis.

CKT: Circuit.

CN: Canadian National Railway.

CNG: Compressed Natural Gas.

CO: Carryover.

CPU: Central Processing Unit.

CSX: CSX Transportation.

CSX/RR: CSX Transportation Railroad.

DA: Distribution Automation.

DASD: Direct Access Storage Device.

DB: Decibel.

DDC: Direct Digital Controller.

Debt Service: Principal and interest payments on outstanding bonds.

DIMP: Distribution Integrity Management Program.

DOT: Department of Transportation.

GLOSSARY

ERC: Emergency Response Center.

ESO: Electric Systems Operations.

Expenditure: The outflow of funds paid or to be paid for an asset obtained or goods and services obtained regardless of when the expense is actually paid.

FC: Suffix for connector type.

FCI: Failed Circuit Indicators.

FEMA: Federal Emergency Management Agency.

FIS: Facility Information System.

Fixed Assets: Assets that are used in a productive capacity, have physical substance, are relatively long-lived, and provide future benefit, which is readily measurable, such as land, buildings, machinery, furniture, vehicles, other equipment and capital projects. Those assets that are capitalized and depreciated over a period of time.

GAAP: Generally Accepted Accounting Principals. Uniform minimum standards and guidelines for disclosing, recording and reporting financial transactions and entries.

GASB: Governmental Accounting Standards Board.

GIS: Geographic Information System.

GPS: Global Positioning System.

HHSC: Hickory Hill Service Center.

HMI: Human Machine Interface.

HP: High Pressure.

HSP: High Service Pump.

HVAC: Heating, Ventilation, and Air Conditioning.

IC RR: Illinois Central Railroad.

IDS: Intrusion Detection System.

IR: Infrared.

JT: Joint Trench.

kV: Kilo Volts, a unit of potential equal to a thousand volts.

KVA: Kilo Volt-Ampere, one thousand volt-amps.

GLOSSARY

KW: Kilowatt.

LC: Suffix for connector type.

LNG: Liquefied Natural Gas.

LOL: Leased Outdoor Lighting.

LWB: Long Wheel Base pickup.

MAOP: Maximum allowable operating pressure.

MDMS: Meter Data Management System.

MG: Millions of gallons.

MGD: Million gallons per day.

MH/DL: Manhole/Duct line.

MHz: Megahertz.

MSS: Management Support System.

NERC: North American Electric Reliability Corporation.

Net Assets: The difference between assets and liabilities for a period of time.

O&M: Operations and Maintenance.

OH: Overhead.

OPEB: Other Post Employment Benefits.

Operating Budget: The portion of the budget that pertains to daily operations that provide basic services. The operating budget contains approved expenditures.

OPGW: Optical Ground Wire.

OTL: Oracle Time and Labor.

OTDR: Optical Time Domain Reflectometer.

Pad: Pad-mounted transformer.

PCB: Polychlorinated Bithenyls.

PSI: Pound per Square Inch.

PTAC: Packaged terminal air conditioning.

PTO: Power Take Off.

GLOSSARY

PV: Photo-Voltaic or solar cells.

ROW: Right of Way.

RR: Railroad.

RTU: Remote Terminal Unit.

Small Cells/5G small equipment utilized to transmit communication signals to enhance speed and reliability of WIFI and cellular operations; fifth generation of mobile network for higher bandwidth and faster access.

SAN: Storage Area Network.

SC: Suffix for connector type.

SCADA: Supervisory Control and Data Acquisition, used to monitor and control the electric system. SCADA gathers information and transfers the information to a central site.

SCBPU: Shelby County Board of Public Utilities.

SPCC: Spill Prevention, Control and Countermeasure.

T-line: Transmission line.

TDOT: Tennessee Department of Transportation.

TEMA: Tennessee Emergency Management Agency.

TIMP: Transmission Integrity Management Program

TOU: Time of Use.

UG: Underground.

UPS: Uninterruptible Power Source.

URD: Underground Residential Development.

USPS: United States Postal Service.

VAV: Variable Air Volume.

VFD: Variable Frequency Drive.

WAQL: Water Assurance Quality Lab.

WWRB: Wash water Recovery Basin.

XFMR: Symbol used to denote transformer.

GLOSSARY

XHP: Extra High Pressure.

XXHP: Extra, Extra High Pressure.