



2 January 2024

MEMORANDUM

From: Chief Executive Officer, Memphis Light Gas and Water Division

To: MLGW Board Chair and Commissioners

Copy To: City of Memphis Mayor  
Memphis City Council Chair and Councilmembers  
Shelby County Municipal Mayors  
Shelby County Legislative Delegation  
Shelby County Commissioners

Subj: REPORT ON FIRST YEAR AS PRESIDENT AND CEO

Encl: Report on first six months as President and CEO

Commissioners and elected leaders,

As 2023 ends and I complete my first full year at MLGW, I want to reflect on the successes and challenges of the past year and look ahead to what I think will be important issues and work in 2024. In short, while we had our share of system and meteorological issues this year, we have made significant progress and set a solid foundation for continued improvements to our service delivery. For brevity, I will not include the update from 6-months ago here but will only add what I think are pertinent updates and outcomes. The 6-month report is attached for your reference, however.

2023 Challenges. Rolling Blackouts in December 2022 were caused by a Polar Bomb Vortex. A water distribution crisis in December 2022 was caused by hundreds of burst Fire Protection systems and thousands of residential and commercial water line breaks. A 3-day freezing rain event in February caused 40,000 customers to lose power. Eight La Nina - El Nino transition induced supercell thunderstorms hit Shelby County from March through July of 2023, causing tornado-like damage, and more than 400,000 customer outages. A vegetation management contractor delivered just 190 miles of line clearance rather than the 1400-mile annual requirement. Our call center was experiencing a completely unacceptable 48-minute average speed of answer time. 41,000 failed registers on water and gas meters caused 96,000 delayed bills and inconvenienced our customers. With little notice, MLGW had to manage a TVA driven reliability and growth provision and an unforecasted 5% electric rate increase by TVA (2.8% net impact to MLGW customers). Despite these challenges, significant progress has been made in all areas of the operation, and our MLGW team met every challenge head on.

Getting back on track. Soon after taking the seat as President and CEO, there were five areas that I determined to be "off track" demanding immediate attention, and as a prerequisite to advancing other

initiatives: customer service (specifically at our call center), electric reliability (specifically vegetation management), staffing (specifically filling the many unfilled vacancies), safety (specifically investigations and the culture/sharing information with employees), and relationships with elected officials that represent our customer base.

- **Customer Service.** Through the balance of 2023, the MLGW team has sustained success in reduced average speed of answer and abandoned call rate. A target of 5 minutes for average speed of answer was achieved by February of 2023. We saw a short-lived uptick in answer times in August and September associated with increased volumes of calls that accompanied resolution of delayed billing, we reached our target again by December, showing that the improvements we made are permanent.
- **Electric Reliability.** Vegetation management is the largest contributor to electric reliability. After terminating the contract with the vendor that failed to achieve annual goals for each of the last three years, the MLGW team solicited bids and awarded contracts to three separate firms to perform line clearance on the approximately 4500 miles of overhead distribution system. The new contractors started work in the second week of September of 2023, and to date are slightly ahead of pace to complete the required 1400 miles of clearance in 12 months. In early December, I asked the companies to accelerate their pace so that we can get back on a 3-year trim cycle faster than 3 years and all have agreed. The 90 crews that started the work will grow to more than 120 crews by the spring of 2024. Additionally, in November I authorized the MLGW labor association, IBEW, to solicit and train up to 4 full crews (16 people) to become part of full-time MLGW complement to manage vegetation in house. I am convinced that with an accelerated pace of tree trimming, that in 2024 we will begin to see improvements in our system reliability metrics.
- **Staffing.** The new programs and expectations for hiring are bearing fruit. In 2023, MLGW has filled 508 positions, compared to 299 in all of 2022. This far exceeded the goal of 400 positions that we set at the start of 2023. During the year, we saw attrition of Linemen and our inability to hire mechanics as critical to our ability to deliver services. So, based on market data, we initiated several programs for retention and recruiting of Linemen and Mechanics: an immediate 10% pay increase to make those positions competitive, a sign-on bonus of \$10,000, a referral bonus program of up to \$2000, and a retention bonus of \$4000 for linemen who agreed to stay for another 3 years. Since inception, these measures have dramatically slowed the attrition of linemen, and allowed us to fill 100% of mechanic vacancies. We look forward to additional success in retaining and hiring individuals for these critical positions.
- **Safety.** Our aggressive new approach to operationalizing safety and changing the culture around safety conversations is proving to be effective. We are ending 2023 having exceeded performance goals in all areas of Safety and have improved the culture of field safety. Lost time and medical recordable incidents were both down more than 30% over 2022, and light duty days were reduced by 29%. The installation of cameras with in-cab audio safety alert technology in our fleet has garnered intended results: vehicular accidents were down 9% overall, and preventable accidents down by 7% over last year, while fuel pull-offs were down 70% and equipment incidents were down by 24%.
- **Building Relationships.** Municipalities and unincorporated areas outside of Memphis proper constitute 33% of MLGW's customer base and attendant revenue stream. Yet, elected officials in those areas felt underappreciated by MLGW. I have worked hard all year to foster a close,

working relationship with mayors of the municipalities and their City Managers/CAOs. In addition to attending their quarterly mayor's group meetings, I have met one on one with the mayors and have engaged them on the LED Streetlight conversion program and our team delivered them several LED options to decide upon. Further, I solicited their feedback on the proposed MLGW 2024 budget and attendant proposed multi-year electric rate increases. During the spring and summer storms, I stood shoulder to shoulder with those mayors whose communities were impacted at press briefings and coordinated messages of help and hope with their teams. Our team increased frequency of community forums from quarterly to monthly, and I have appeared at "MLGW Power Hour" community meetings across the entire service area including in the Towns of Collierville and Arlington, the City of Millington and in unincorporated Shelby County. At my request, I appeared before the Shelby County Commission and the Shelby County delegation of state representatives to share information and updates. I have regularly communicated with State officials to keep them apprised on pertinent issues such as our budget. These efforts were in addition to continuous text and email updates and zoom sessions with elected officials across the service area any time there was a storm or significant outage. For these reasons, I believe that we have significantly improved not just communications, but trust between the municipalities and MLGW and have established a new baseline for our relationship going forward. I have received the request from the municipal mayors that their appointed representatives to the MLGW board be granted full status as voting MLGW board members rather than simply advisory members. I believe this is appropriate given the percentage of our customer base that they represent and does not erode the charter authority of Memphis City Council. In 2024, with the approval and direction from the MLGW Board of Commissioners, I will advance this to the Memphis City Council for consideration.

Continuous improvement. Getting back on track with day-to-day work is important, but it is not enough to deliver the kinds of improved services that our customers should expect. In 2023 we made significant investments in all our product lines, with the aim of improving value and reliability for our customers and have institutionalized our public accountability for getting things done.

- **Streetlights.** On January 24<sup>th</sup>, 2023, I committed to Mayor Strickland that we would convert all streetlights in Memphis to LED in one year's time, and we are on track to complete that task by January 15<sup>th</sup>, 2024. To date we have converted 76,000 of 78,000 lights. Immediately after starting the Memphis project, we began coordination with other municipalities to begin their conversion. Collierville and Arlington will soon be underway, as will Millington, and Bartlett is now more than 93% complete with 7900 of 8400 streetlights converted. I anticipate having the rest of the streetlights in the municipalities who opt for conversion to be complete by this spring/summer 2024. This project proves value for everyone. In addition to better illumination, these fixtures also enable us to integrate smart technology with accessories like cameras, license plate readers and air quality monitors. We have work left to do in early 2024 to ensure that all converted lights are working properly, and to fill in areas that are without lights, delayed largely because of a supply chain shortage of streetlight arms which has now been resolved.
- **Gas.** I am very pleased to say that in 2023 we completed all the 2020 "Way Forward" reliability improvements for our gas system ahead of schedule, save for a single 5-mile Extra High Pressure line replacement slated for 2025. We are well prepared for the winter heating months, having filled our in-system, underground storage, and our storage tank at the liquid natural gas plant

(LNG) which means we have options and backups to market gas purchases this winter. Our gas team has done a fantastic job at delivering a hedging program that will bring stability to gas prices this winter. Their successful hedging program in 2022 generated \$44M in total value for our customers, and we still have approximately \$12M of that \$44M to apply toward keeping customers' gas bills low this winter. In 2023 this meant that MLGW had the lowest residential gas rates in the nation, after being third lowest in the nation from 2020-2022. We anticipate being similarly competitive in 2024.

- **Water.** We are right on schedule to complete all the 2020 “Way Forward” water system reliability improvements by the end of 2024. Like gas, this means we are well prepared for winter, with additional wells online and variable frequency drives put into service during 2023 to help us pump water across the system should there be an unexpected deep freeze. At the same time, the team has for the fourth year exceeded their goal for annual lead service line replacements in 2023 and are on pace to replace 5500 by the end of 2024 against the original goal of 5000. We also were pleased to receive the results of the MLGW funded 5-year aquifer study conducted by the UofM Center for Applied Earth Science and Research (CAESAR) which will help us plan our well placements to not hazard the aquifer. I also approved continued funding for the 5-year Phase II portion of the study that will refine our understanding of the aquifer and environment around it.
- **Electric.** A bit of context here. For decades, MLGW has underinvested in maintenance and regular replacement of electric distribution infrastructure. The inevitable result is customers losing power more often and for longer periods. I have determined that the root cause of that progressive underinvestment is the lack of necessary rate increases over time to keep up with inflation and wage growth. Simply, from 1985 to 2020 (35 years) MLGW had one (1) electric rate increase of 4.7%, *and two rate decreases in the same period*. Meanwhile, inflation over that time was 2.54% per year, or a cumulative 240%. Together with the pattern of growth highlighted in my 6-month report (we effectively doubled the size and span of the electric distribution system, but added only about 4-5% more customers), the organization simply had to “kick-the can down the road” on routine maintenance. Effectively, the organization devolved over time to a “run to fail” operation, fixing things only after they broke. Broken components in the electric utility industry means customers losing power, and therefore reliability numbers continued to erode. Thankfully in 2019, the leadership at MLGW had the wisdom to ask for a rate increase to fund regular and recurring maintenance and replacement of outdated infrastructure to improve reliability, and that plan was called “The Way Forward”. This 5-year plan kick-starts the work that must continue annually as a permanent part of recurring maintenance and scheduled replacement of critical distribution system components. Continuing that path will, over time, improve reliability and resilience. We are on track to complete the “Way Forward” electric reliability improvements by the end of 2024, with 2 notable exceptions. First, is the tree trimming goal which is now back on track with our new plan. Second, the distribution automation switches were temporarily put on hold until we could acquire the communications backbone for the system, which includes a PLTE spectrum license to control communications, as recommended by Burns and McDonald in 2022. Now that a 600MHz system has been decided and the PLTE spectrum procured, we will begin installing DA switches in earnest with the goal of having all 2000 switches introduced over the next few years.

- **Transparency and Accountability.** Through our 4M Forum, we established a publicly available dashboard that reviews and accounts for our performance. We continue to refine our monthly review and use the data to drive process improvements internally. Even more impactful is being able to share this data with the public to build trust and to show progress. Recently, we added our tree trimming dashboard so that everyone can track the progress of this important work.

Breakthrough Thinking. Just as we are facing the challenges of today and improving service delivery, we know that it's only going to get tougher in the future. The pressure on the bulk electric system will continue to build, threats to safe drinking water will emerge and we will be on the front lines of protecting it, utilities will become an increasingly key part of the competition for economic development projects and for attracting new residents to our community. That is why in 2023 we invested some of our time thinking about how to overcome challenges that we can foresee, and planning now for decisions we know we will be faced with in years to come.

- **Modernize the Grid.** The recently approved 2024 electric rate increase will be allocated to grid modernization which means the full implementation of an Automated Distribution Management System (ADMS). This system will improve reliability and decrease the outage minutes and includes 1,000 additional Distribution Automation switches to cover the entire system, Fault Location Isolation and System Restoration (FLISR) capability, and a resilient communications network (using PLTE acquired in 2023) to facilitate command and control of the system. Our Grid Modernization efforts will begin in earnest in 2024 and will continue through 2028. We will report our progress along the way with annually defined objectives,
- **Battery Storage, Solar and AeroDerivative generation.** The rolling blackouts of late 2022 were a wakeup call for many, and a call to action for local power companies in the Tennessee Valley. For MLGW, it brought to the fore our thinking about local generation and battery storage as measures we could employ to be part of building a more resilient grid and to help meet the energy challenges of the future. We tasked our team to start the planning for incorporating up to 100MW of battery storage into our local distribution system as a peak shaving and resilience measure, and to plan for up to 200MW of local solar power that we can install over the coming years to help meet growing demand for clean energy. These initiatives were approved to be funded in the 2024 budget. In response to the Reliability and Growth Provision (RGP) developed by TVA that would mandate contractual interruption for large new electric loads (like manufacturing plants), MLGW sought solutions that could meet demand locally without interruption. AeroDerivative Turbine Generators were the clear choice as the most rapidly deployable source for electric power, a resource that once procured could be deployed into the system within weeks, not years as is the case with other generation solutions. While new gas-fired generation raised the concern of some local environmental groups, it remains the most immediately available option should MLGW need a resource on short notice. Because TVA eliminated the RGP in early December of 2023, MLGW has removed aeroDerivative turbines from our 2024 budget (to be purchased through issuance of bonds not rates) but will keep our team working on specifications and locations should that need arise in the future.

- **Broadband Initiative.** MLGW has been a partner to the City of Memphis as the City worked through the RFP and ultimate contract award process resulting in a vendor that will deliver ubiquitous broadband internet access across the entire City, including low-income areas. MLGW's role was to develop a process for speed of design and approval for attachments of broadband infrastructure to MLGW distribution facilities, and to identify support necessary for MLGW to deliver more throughput to enable rapid deployment that will be funded by the broadband vendor. I am pleased to report that the City awarded the contract and the MLGW is prepared for the first round of attachment requests.
- **MLGW 2045.** Since March of 2023, the MLGW team has engaged in substantial research of utility trends past, present, and future and is developing a path forward for community engagement that will begin in the spring of 2024. Using research as well as community and peer group inputs, the team will use the balance of 2024 to develop a long-term plan that will guide our actions as we build a utility that is effective for the needs of today, and ready for the challenges of tomorrow.

Forecast. The following are areas of work that we know will be top of mind for us and our customers in 2024.

- **Lead Service line replacement.** Late in 2023, the Biden Administration and the Environmental protection agency announced that they were allocating \$15B and setting a deadline of 10 years from now to “get the lead out” of public water supplies. MLGW has been replacing Lead Service lines (on the MLGW side of the meter) since 2012 and to date has inspected and or replaced more than 8,000 of the suspected 24,000 lead services. (In total, MLGW has approximately 255,000 services.) This directive mandates utility providers involvement in surveying both the utility AND property owner side of the meter and to develop a plan for removing lead lines on both sides of the meter. MLGW has retained a firm to help us complete the survey in 2024, and to assist us with developing a plan for replacement before the EPA deadline. This will be a complex and multi-partner endeavor as we determine what the all-in cost for replacement will be, who will share the burden of the cost, how we will recover funds spent on replacement of private side lines, all while protecting our most vulnerable populations and working to ensure that they are not financially impacted by this effort. Further, the effort nationwide is expected to cost at least \$90B, which means federal funds will only cover approximately 16% of all costs. It will be left to local government and utilities to determine how to fund the balance.
- **Improving the Brand/Image.** In 2024 we will begin work on improving our image and brand sentiment. We are blessed with the best drinking water in the country, an abundance of inexpensive natural gas, and a very reliable source of bulk electric power that are the envy of so many communities across the country. Combined with keeping electric rates low and flat for more than 35 years and having the lowest combined three sector residential utility bills in the nation, MLGW should be a terrific brand and have a great reputation. Yet 99.92% delivery of electric reliability does not meet our customers' expectations, one rolling blackout in 90+ years and two boil water advisories during the same period are somehow equated with failed performance. Simply, our customers want things to work and regardless of how low we have kept rates, the “Memphis Light Gas and Robbery” moniker endures. I recognize that this is largely because “paying the light bill” is viewed by many as an onerous, unpredictable, and non-

negotiable monthly obligation. Over the last year, our MLGW team has done yeoman's work to improve communications and connect with customers, especially during crisis and outages, a decidedly reactive measure, but we have more work to do. It is time for MLGW to begin to "tell the story" of the value proposition of the utility in a proactive way so that we can begin to shift the narrative from an overly negative tone to one that approaches a more neutral sentiment by our customers, and one where MLGW is viewed as the reliable source of information for general or specific utility/energy program information and a helpful partner when individuals have challenges. In short, I want our customers to understand our value, know that our team is working incredibly hard for them, and to appreciate "when everything is working" because it frees them to live a life of comfort and convenience.

- **Facilities Upgrade.** As early as 2016, MLGW recognized the need to replace the aged and obsolete central shops facility located near the medical district and acquired property near the North Center adequate to build a new central shops facility (heavy equipment maintenance facility). Funding for this project has already been allocated and MLGW intends to complete all environmental prerequisites necessary and break ground on construction of this facility in 2024. Further, to realize the effectiveness of Grid Modernization, MLGW needs a new System Operations facility that is suitable to house a resilient, modern SCADA and ADMS operation, a home for Commercial and Residential Engineering that is currently without a facility, and up to 100 personnel for the Grid modernization and continuing operations project. MLGW has determined that a 70,000 sq ft facility (meeting seismic and electrical redundancy/battery backup standards) is adequate to meet the need. With commercial construction costs averaging \$625-\$650 psf, a facility costing \$43.7M is probable (fixtures and equipment excluded). In 2024, MLGW will have to decide whether to design and construct this facility on 10 acres of land presently owned by MLGW, or whether there is an existing available building suitable to meet the needs described above.

Conclusion: It's been a dynamic year. I have worked hard to set new operational expectations for the team, to build beneficial relationships with employees and the elected officials who represent our customers, and established priorities that will help move us in a positive direction. My number 1 priority remains to "earn our customers business". I know they don't have a choice, but we should act like they do. Translating that into every action we take and decision we make is something we will work on daily. We are on a path to the improved electric reliability and system resiliency that our customers expect and are looking to the future to ensure that we can continue to meet the needs of our growing community. It's my pleasure to serve in this capacity. I am glad to be accountable for results, and eager to take on the challenges ahead of us.

I want to thank all of you for your partnership, particularly the MLGW Board of Commissioners who are very committed and work very diligently to hold me and my team accountable. I look forward to achieving great things with all of you in 2024!