

# MLGW Five-Year Plan Update

Memphis City Council  
MLGW Committee  
August 23, 2022

*\* Data as of August 2022 meeting.*



# Operational Dashboard

Labor Reductions	Labor Savings	Total Other Operational Savings	Total Operational Savings	Procurement Timeline	Procurement Bids
2022 FTE Target	2022 FTE Target	2022 Annual Target	<b>2022 Annual Target</b>	Days to Complete Target	Bids per RFP Target
75	\$7,100	\$11,521	<b>\$18,621</b>	215	3.0
2022 YTD Actual	2022 YTD Actual*	2022 YTD Actual*	<b>2022 YTD Actual*</b>	2022 YTD Actual	2022 YTD Actual
0	\$3,334	\$7,681	<b>\$11,015</b>	235	3.7
0%	47%	67%	<b>59%</b>	109%	123%
% of Annual Target	% of Annual Target	% of Annual Target	<b>% of Annual Target</b>	% of Annual Target	% of Annual Target
375	\$67,200	\$24,500	<b>\$91,700</b>		
Cumulative Target	Cumulative Target	Cumulative Target	<b>Cumulative Target</b>		
152.0	\$13,696	\$19,202	<b>\$32,898</b>		
Cumulative Actual	Cumulative Actual	Cumulative Actual	<b>Cumulative Actual</b>		
40.5%	14.9%	78.4%	<b>35.9%</b>		
% of Cumulative Target	% of Cumulative Target	% of Cumulative Target	<b>% of Cumulative Target</b>		

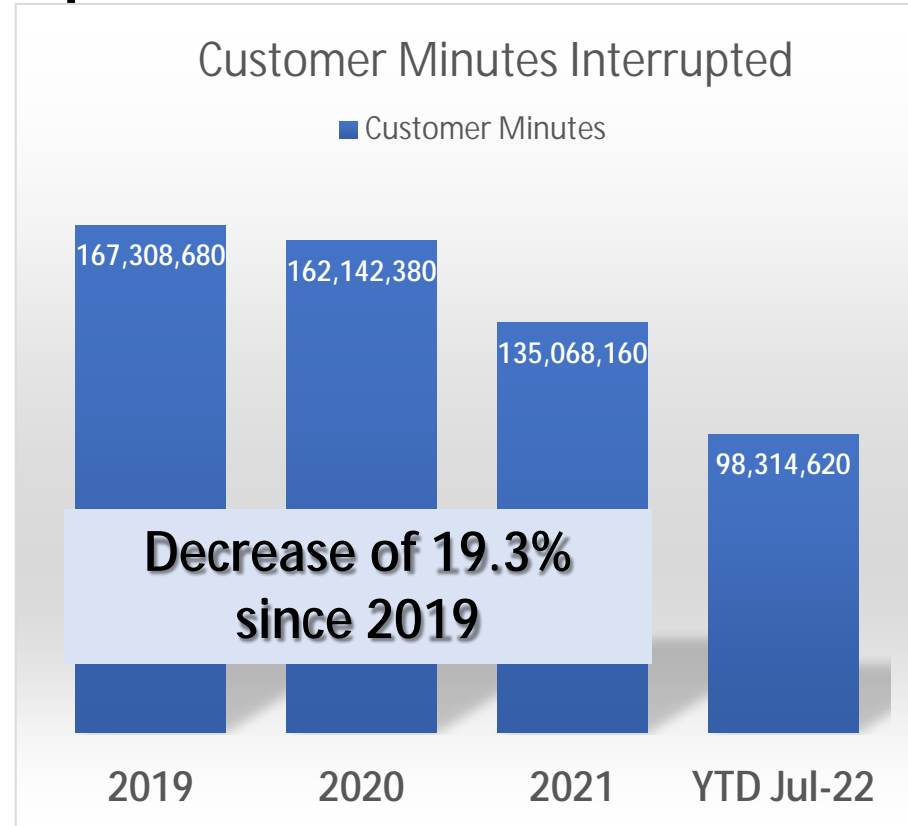
# Electric Division Selected Projects

Electric Division	Metric	2022 YTD Actual	2022 Target	Cumulative Five Year Actual	Cumulative Five Year Target	% of Annual Target	% of Project Complete	% of Cumulative Target	Notes/Issues/Updates
Tree trimming	Miles trimmed	190.5	1400	1433.3	7000	13.6%	13.6%	20.5%	8/15/22 - 190.5 miles (+24.7), 54 total crews, still in negotiations with Asplundh (may be adding 3 crews next week), ABC adding 1
Wood poles replaced	# of Poles	505	600	1624	2600	84.2%	84.2%	62.5%	8/15/22 - 505 YTD (+59)
Distribution Automation deployment	# of units installed (designed/installed)	83	336	215	1100	24.7%	24.7%	19.5%	8/17/22 - Dashboard info: 134 designs completed, 94 devices installed, 83 (+11) devices commissioned; slow down on installs due to materials, expecting to get connectors in at the end of Aug; Burns & Mc contract was approved, looking at communications study and change mgmt; SCADA points contract was approved and access points are now available for commissioning (OSI may be able to assist as labor was included)
Substation Breaker replacements	# of units installed	12	15	33	60	80.0%	80.0%	55.0%	8/17/22 - 12 complete, 7 in progress
Substation Transformer replacements	# of units installed	1	2	11	20	50.0%	50.0%	55.0%	8/17/22 - 1 complete, 4 in progress (5335 A, B & C-phase transformers all at Sub 5), 6557 transformer at Sub 6
Underground cable replacements	Feet of cable (designed/installed)	37,582	89,870	131,147	392,400	41.8%	51.0%	33.4%	8/17/22 - 3,950 cut over this reporting period, 3 full time inspectors vacate; waiting on 3 retiree positions to fill; still experiencing some material issues (hand holes, #2 elbows, tap kits, terminal bars, 2in straps); Don will confirm but believe we have enough jobs released to meet this year's goal (96k in construction/complete, approx 60k in design)

# Electric Reliability: Five-Year Improvement Plan

## Areas of Focus

- Replacement of Defective UG Cable
- Wood Pole Management
- Tree Trimming
- Aging Substation Equipment
- Automation of Distribution System
- Hardening of OH Electric System



# Gas Division Selected Projects

Gas Division	Metric	2022 YTD Actual	2022 Target	Cumulative Five Year Actual	Cumulative Five Year Target	% of Annual Target	% of Project Complete	% of Cumulative Target	Notes/Issues/Updates
Steel tap replacements	# of units R/P	477	1000	1264	2050	47.7%	68.0%	61.7%	8/15/22 - 477 (+36); construction expects to get to the goal
Gas Transmission & Extra HP Pipelines	Miles completed	0	0.72	0.7	5	0.0%	63.0%	14.0%	8/15/22 - 100% design, 100% material ordered, 100% received, 25% construction; all pipe installed
Regulator Stations	# of Stations	0	2	5	12	0.0%	50.0%	41.7%	8/15/22 - 100% design, 100% material ordered, 96% received, 0% construction; Airways is started and larger of the two, second is smaller project

# Water Division Selected Projects

Water Division	Metric	2022 YTD Actual	2022 Target	Cumulative Five Year Actual	Cumulative Five Year Target	% of Annual Target	% of Project Complete	% of Cumulative Target	Notes/Issues/Updates
Production Wells	# of new wells	1.95	3	8	14	65.0%	65.0%	57.1%	8/17/22 - Davis Well 427 In service. Davis Well 410 in water testing. Morton Well 604A GC is working on foundations. Electric finalizing design. Mallory Well 22D is waiting on distribution tie-in and electric tie in. McCord 255A Drill contractor has moved on site.
Station rehabilitation	% progress	0%	TBD	TBD	TBD	TBD	TBD	TBD	8/17/22 - HDR onsite this week. Currently doing McCord, Lichterman, Sheahan and Davis condition assessments.
Lead service line replacements/removals	# of services installed	652	1000	2169	5000	65.2%	65.2%	43.4%	8/15/22 - 652 YTD (+82)
Digital Process Control Systems	# of units installed	1	2	1	7	50.0%	50.0%	14.3%	8/17/22 - Allen is currently active and in progress. Lichterman DPC is complete. Morton & Palmer DPC Panels and cabinets PO are issued. Contractor to start prep work for installs.
VFD Replacements	% progress	1	2			50.0%	50.0%		8/17/22 - Allen VFD has been installed. Shaw VFD has been delivered and contractor is onsite wiring up for motor and VFD. Morton VFD has been delivered but has to wait for off-peak season to complete install.
Mallory Washwater Recovery Basin	% progress	95%	100%			95.0%	95.0%		8/17/22 - Electric tie in for decant pumps in progress. WO in Job Site Ready. Waiting on two large valves to be delivered to get installed before WWRB can be completed and put into service. Estimated 12 weeks to delivery, late October. Valves have been delayed due to supply chain backup.

# Summary

- Improvements in Procurement timeline and Procurement bids.
- Position requests for the 2023 Budget would erase our position reductions to date...trying to balance these.
- Electric Division
  - Challenges continue in Tree Trimming.
- Gas Division
  - Shifting efforts and resources to Steel Tap Replacements.
  - Applied for Infrastructure Investment & Jobs Act 2021 (IIJA) funding of \$59.33 million to assist with Way Forward projects.
- Water Division
  - Received notification of \$39.5 million in American Rescue Plan grant funding for various water projects.
  - Received the HDR final report regarding Allen and Shaw pumping stations.
  - Engineering Services contracts related to the new Allen Pumping Station Design and Filter Media upgrades have been approved.

# Reminder of MLGW's Total Capital Investment Plans (All spending)

(inclusive of Way Forward previously discussed)

§ MLGW has significant investments planned in utility infrastructure.

§ The 5-year total capital expenditure plan is almost \$1.1 billion.

	2022	2023	2024	2025	2026	TOTAL
CLASSIFICATIONS	BUDGET	PROJECTED	PROJECTED	PROJECTED	PROJECTED	
TOTAL SUBSTATION & TRANSMISSION	\$32,753,444	\$37,681,437	\$23,520,330	\$18,786,996	\$15,415,000	\$128,157,207
TOTAL DISTRIBUTION	\$112,521,228	\$105,295,340	\$102,790,452	\$98,296,309	\$71,027,577	\$489,930,905
TOTAL GENERAL PLANT	\$46,099,408	\$60,196,496	\$53,499,996	\$31,868,680	\$26,278,925	\$217,943,505
Allowance for Late Deliveries (Transportation)	(\$4,242,250)	(\$4,242,250)	(\$4,242,250)	(\$4,242,250)	(\$4,242,250)	(\$21,211,248)
Additional Allowance for Late Deliveries	(\$31,863,442)	(\$34,543,955)	(\$30,871,456)	(\$24,699,697)	(\$17,453,601)	(\$139,432,151)
TOTAL ELECTRIC DIVISION	\$155,268,388	\$164,387,068	\$144,697,072	\$120,010,038	\$91,025,652	\$675,388,218

	2022	2023	2024	2025	2026	TOTAL
CLASSIFICATIONS	BUDGET	PROJECTED	PROJECTED	PROJECTED	PROJECTED	
TOTAL PRODUCTION SYSTEM	\$200,000	\$507,000	\$100,000	\$1,425,000	\$1,325,000	\$3,557,000
TOTAL GAS DISTRIBUTION SYSTEM	\$29,656,506	\$24,616,647	\$33,921,737	\$21,839,083	\$21,985,722	\$132,019,696
TOTAL GENERAL PLANT	\$18,260,863	\$14,531,762	\$11,389,607	\$14,614,144	\$11,341,757	\$70,138,134
Allowance for Late Deliveries (Transportation)	\$0	\$0	\$0	\$0	\$0	\$0
Additional Allowance for Late Deliveries	(\$3,582,172)	(\$2,051,581)	(\$3,202,768)	(\$1,696,145)	(\$1,050,995)	(\$11,583,662)
TOTAL GAS DIVISION	\$44,535,197	\$37,603,828	\$42,208,576	\$36,182,082	\$33,601,485	\$194,131,168

	2022	2023	2024	2025	2026	TOTAL
CLASSIFICATIONS	BUDGET	PROJECTED	PROJECTED	PROJECTED	PROJECTED	
TOTAL PRODUCTION SYSTEM	\$23,041,350	\$43,364,850	\$39,141,600	\$30,498,600	\$13,995,000	\$150,041,400
TOTAL DISTRIBUTION SYSTEM	\$17,915,224	\$17,449,827	\$17,085,777	\$16,345,828	\$16,628,440	\$85,425,095
TOTAL GENERAL PLANT	\$2,193,954	\$2,069,117	\$2,085,654	\$2,209,216	\$2,255,097	\$10,813,037
Allowance for Late Deliveries (Transportation)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0
Additional Allowance for Late Deliveries	(\$8,028,219)	(\$12,405,126)	(\$11,490,973)	(\$9,639,095)	(\$6,404,074)	(\$47,967,486)
TOTAL WATER DIVISION	\$35,122,309	\$50,478,669	\$46,822,057	\$39,414,548	\$26,474,463	\$198,312,046



# Questions & Appendix



# Water Division Station Rehabilitation Project

Infrastructure Assessment Project					
Project Name	Phase 1 Scoping	Phase 2 Prep & Planning	Phase 3 Evaluation	Phase 4 Final Reports	Issue - Executive Summary
Hydraulic Water Model Update	\$258,780.00	100%	100%	95%	Model is calibrated and returned.
Pump Analysis	\$113,030.00	100%	100%	90%	Pump technical memo and report has been delivered to MLGW.
Filter Media Analysis	\$380,650.00	100%	100%	95%	Had final review meeting with results.
Allen & Shaw Condition Assessments	\$255,739.00	100%	100%	100%	Allen & Shaw final report delivered.
Condition Assessments (Remaining Pumping Stations)	\$501,420.00	0%	0%	0%	On site this week. Currently doing McCord, Lichterman, Sheahan and Davis
Well Field Analysis	\$81,245.00	80%	15%	0%	Evaluation in Process