

A nighttime photograph of a city skyline across a river. A large, illuminated steel truss bridge with a prominent arch spans the river. The bridge's lights are reflected in the water. In the background, several city buildings are lit up, including one with a prominent red sign. The sky is a deep blue.

Way Forward Infrastructure & Reliability Improvement Update

May 2023

** Preliminary Data as of 5/17/2023*

Electric Division Selected Projects



Electric Division	Metric	2023 YTD Actual	2023 Target	Cumulative Five Year Actual	Cumulative Five Year Target	% of Annual Target	% of Cumulative Target	Notes/Issues/Updates
LED Deployment	Converted Fixtures	9774	77280	9774	77280	12.6%	12.6%	Target is Dec 2023
Tree trimming	Miles trimmed	68.5	1400	1737.3	7000	4.9%	24.8%	2/13/23 - 22 Miles YTD: Contract No. 12420 – Line Clearance (Gregg Deaton), Optional Bidders Orientation Meeting was held on 2/3, 3 addendums were issued on 2/7, 2/8 and 2/13, Bids Due on 2/28/23 3/14/23 - 44.8 Miles YTD (+22.8). Contract bids being evaluated. 4/15/23 - 58.2 Miles YTD (+13.4). Contracts go to the board 6/7 5/16/23 - 68.5 Miles YTD (+10.3), Still doing strategic tree cutting and spot trims
Wood poles replaced	# of Poles	349	600	2160	2600	58.2%	83.1%	3/13/23 - 212 YTD (+109), 6 outside crews 4/15/23 - 297 YTD (+87) 5/16/23 - 349 YTD (+52), 8 crews with promise of 9
Distribution Automation deployment	# of units installed (designed/installed)	71	336	328	1100	21.1%	29.8%	3/15/23 - 2 Outside crews. Test connectors in. 114 in construction. Commissioned 40 devices. 4/17/23 - 52 (+12 devices commissioned) 5/17/23 - 71 (+19 devices commissioned), 66 designs completed, 80 installed
Substation Breaker replacements	# of units installed	8	12	51	60	66.7%	85.0%	3/14/23 - 6 complete, 5 others in progress 4/17/23 - 7 complete, 5 others in progress 5/17/23 - 8 complete, 4 others in progress
Substation Transformer replacements	# of units installed	1	6	12	20	66.7%	60.0%	4/17/23 - 6 in progress (5335 A, B & C-phase transformers all at Sub 5) - 55%, Spare transformer at Sub 5 - 80%, 6557 transformer at Sub 6 - 95%, 3057 at Sub 13 - 15% (Total 52% complete of 6) 5/17/23 - 1 complete, 5 in progress (5335 A, B & C-phase transformers all at Sub 5) - 60%, Spare transformer at Sub 5 - 80%, 3057 at Sub 13 - 40% (Total 67% complete of 6)
Underground cable replacements	Feet of cable (designed/installed)	57,246	89,870	222,904	392,400	63.7%	56.8%	2/14/23 - Confirm goal for 2023; No updates on cable but several large work orders in the queue; Don/Gregg to confirm goal 3/15/23 - 4565 Blanford cutover on 3/9/22. 3 other jobs 50% complete. 5/17/23 - 57k YTD, 5 crews working, several big jobs from 2022 cutover this year

Gas Division Selected Projects



Gas Division	Metric	2023 YTD Actual	2023 Target	Cumulative Five Year Actual	Cumulative Five Year Target	% of Annual Target	% of Cumulative Target	Notes/Issues/Updates
Steel tap replacements	# of units R/P	144	1000	2033	3722	64.4%	54.6%	2/15/23 - All steel tap have been released to construction (design 100%) 3/15/23 - Plan to start construction end of March/beginning of April. 5/17/23 - 144 YTD
Regulator Stations	# of Stations	0	2	8	12	39.0%	66.7%	3/15/23 - Plan to complete the designs by end of March (75% complete). 4/18/23 - Design is at 95% complete 5/17/23 - Design 95%, Material Order 73%, Received 50% (targeting end of May for 100% received)

Water Division Selected Projects



HDR Study Items	Metric	2023 YTD Actual	2023 Target	Cumulative Five Year Actual	Cumulative Target	% of Annual Target	% of Cumulative Target	Notes/Issues/Updates
Production Wells	# of new wells	1	3	11	14	33.3%	78.6%	5/18/23 - Morton Well 604A - In service Mallory Well 22D - Water and Electric complete. Water Ops electric is in progress. GC to get fence and gravel installed. McCord 255A - Well drilled. Contractor to install pump fdn and discharge head. Stabilize site. Mallory Well 21D - Well drilled. Contractor to install pump fdn and discharge head. Stabilize site. McCord 217A - Layne moving to this site after 21D.
Station rehabilitation	% progress	0%	TBD	TBD	TBD	TBD	TBD	3/15/23 - About 50% complete with technical memo. 5/18/23 - Well Field Analysis in process, Condition Assessments - Technical report planned to be returned by end of 2nd QTR 2023.
Lead service line replacements/removals	# of services installed	317	1000	3601	5000	31.7%	72.0%	3/13/23 - 139 YTD (+51) 4/17/23 - 234 YTD (+95) 5/16/23 - 317 YTD (+83)
Digital Process Control Systems	# of units installed	1	2	6	9	50.0%	66.7%	4/18/23 - Morton - Contractor on site; installation in progress. Palmer - Shutdown to start 4/17. Migration of existing into new DPC system. 5/18/23 - Morton - Contractor on site; installation in progress. Palmer - Completed.
VFD Replacements	# of units installed	0	2	4	10	0.0%	40.0%	5/18/23 - Shaw VFD #2 - Delayed - new bearing is est. to be delivered in May. Once received, a week to assemble motor then it will be delivered to MLGW. Davis VFD #3 - Contractor is on site. Installation of electrical conduit and wiring in progress. VFD scheduled for delivery end of May - Major Componet. Davis VFD #1 - Contractor in process of getting ID numbers
Allen Pumping Station - Design	% progress	0%	30%			0.0%		5/18/23 - Design is in progress. 20 month estimate. (1/2025)
Filter System Upgrades - Design McCord, Shaw, Davis, Mallory & Morton	% progress	7%	100%			7.0%		5/18/23 - Design is in progress. 9 month estimate. (2/2024)
Mallory Washwater Recovery Basin	% progress	100%	100%	1.00	1	100.0%	100.0%	4/18/23 - Basin functions according to design. Aiming to complete project with Contractor. Will install MLGW programming logic. 5/18/23 - WWRB is complete and in service. Decommission of existing WWRB is in process now. Contractor decommissioning old basin.

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 delivered.
Filter Media Analysis	\$380,650.00	100%	100%	95%	Filter media analysis report delivered.
Allen & Shaw Condition Assessments	\$255,739.00	100%	100%	100%	Allen & Shaw final report delivered.
Condition Assessments (Lichterman, Davis, McCord, Sheahan)	\$501,420.00	100%	100%	75%	Technical report planned to be returned by end of 2nd QTR 2023.
Well Field Analysis	\$81,245.00	80%	15%	0%	Evaluation in Process

Annual and Cumulative Project Spending

HDR Study Items	Metric	2023 Actual	2023 Target	Cumulative Five Year Actual	2024 Cumulative Target	% of Annual Target	% of Cumulative Target
Electric Division							
LED deployment	Dollars (in thousands)	\$548	\$47,000				
Tree trimming	Dollars (in thousands)	\$1,360	\$19,000	\$26,806	\$100,874	7.2%	26.6%
Wood poles replaced	Dollars (in thousands)	\$1,794	\$3,000	\$12,419	\$15,000	59.8%	82.8%
Distribution Automation deployment	Dollars (in thousands)	\$2,273	\$31,000	\$23,855	\$130,000	7.3%	18.4%
Substation Breaker replacements	Dollars (in thousands)	\$1,566	\$3,917	\$2,646	\$15,700	40.0%	16.9%
Substation Transformer replacements	Dollars (in thousands)	\$1,531	\$6,709	\$22,128	\$39,000	22.8%	56.7%
Underground cable replacements	Dollars (in thousands)	\$1,159	\$10,000	\$13,607	\$54,000	11.6%	25.2%
		\$10,231	\$120,626	\$71,422	\$354,574	8.5%	20.1%
Gas Division							
Steel tap replacements	Dollars (in thousands)	\$57	\$5,698	\$5,208	\$17,000	1.0%	30.6%
Gas Transmission & Extra HP Pipelines	Dollars (in thousands)	\$0	\$0	\$3,356	\$33,235	#DIV/0!	10.1%
Regulator Stations	Dollars (in thousands)	\$7	\$526	\$755	\$2,851	1.3%	26.5%
		\$64	\$6,224	\$9,807	\$60,086	1.0%	16.3%
Water Division							
Production Wells	Dollars (in thousands)	\$1,429	\$4,367	\$6,866	\$28,603	32.7%	24.0%
Station rehabilitation	Dollars (in thousands)	\$0	\$0	\$623	\$59,350	#DIV/0!	1.0%
Lead service line replacements	Dollars (in thousands)	\$303	\$2,500	\$4,843	\$12,500	12.1%	38.7%
Digital Process Control Systems	Dollars (in thousands)	\$538	\$1,450	\$3,169	\$4,755	37.1%	66.6%
VFD Replacements	Dollars (in thousands)	\$482	\$3,790	\$3,463	\$10,045	12.7%	34.5%
Allen Pumping Station - Design	Dollars (in thousands)	\$0	\$0	\$9,804	\$7,400	#DIV/0!	132.5%
Filter System Upgrades - Design McCord, Shaw, Davis, Mallory & Morton	Dollars (in thousands)	\$46	\$687	\$9,850	\$7,400	6.8%	133.1%
Washwater Recovery Basin	Dollars (in thousands)	\$152	\$100	\$9,956	\$7,400	152.0%	134.5%
		\$2,950	\$12,894	\$48,574	\$137,453	22.9%	35.3%
Totals		\$13,245	\$139,744	\$129,803	\$552,113	9.5%	23.5%