



August 15, 2024

FY24 Organizational Performance



FY24 Organizational Performance

- 10,800 KUB Fiber customers
- Inflation Response Plan
- Western Avenue Substation in service
- August 2023 storm response
- Gaseous chlorine disinfection eliminated from treatment plants
- \$37.5 million in W/MBE expenditures
- KUB Community Solar 95% subscribed
- Wastewater bond rating upgraded to AAA
- Systems financially sound

FY24 Financial Performance

- Positive earnings, except fiber
- All divisions under budget appropriations
- O&M \$4 million under budget
- Capital \$9 million under budget, due to timing
- Water/wastewater margins up; gas and electric down
- \$24 million in grant and FEMA reimbursements
- Cash positions solid
- Debt level rose \$30 million
- High-quality bond ratings

FY24 Budget Expenditure Variance

	Electric	Gas	Water	Wastewater	Fiber	Total
Purchased Energy / COGS	\$23,342	\$24,767	---	---	\$5,664	\$53,773
O&M	(\$4,300)	\$3,401	(\$911)	(\$651)	\$5,962	\$3,501
Capital	\$2,566	(\$268)	\$6,581	(\$250)	\$835	\$9,464
Debt Service	\$1,010	\$0	\$148	\$434	\$351	\$1,943
Taxes & Equivalents	\$235	\$422	\$411	\$4	\$151	\$1,223
Loan to Fiber Division	\$2,000	---	---	---	---	\$2,000
Original Budget Variance	\$24,853	\$28,322	\$6,229	(\$463)	\$12,963	\$71,904
Additional Appropriations	---	---	---	\$3,000	---	\$3,000
	\$24,853	\$28,322	\$6,229	\$2,537	\$12,963	\$74,904

\$ in 000's () = Over Budget

FY24 Budget Revenue Variance

	Electric	Gas	Water	Wastewater	Fiber	Total
Sales Revenue	(\$31,004)	(\$27,522)	\$2,202	\$5,148	(\$7,932)	(\$59,108)
Other Revenue	\$3,248	\$526	\$6,130	(\$508)	\$42	\$9,438
Increase (Decrease)	(\$27,756)	(\$26,996)	\$8,332	\$4,640	(\$7,890)	(\$49,670)

\$ in 000's

() = Under Budget

FY24 Budget Cash Impact

	Electric	Gas	Water	Wastewater	Fiber	Total
Budget Revenues	(\$27,756)	(\$26,996)	\$8,332	\$4,640	(\$7,890)	(\$49,670)
Budget Expenses	\$24,853	\$28,322	\$6,229	(\$463)	\$12,963	\$71,904
Increase (Decrease)	(\$2,903)	\$1,356	\$14,561	\$4,177	\$5,073	\$22,234
Bond/Loan Proceeds	\$4,225	---	\$104	---	(\$2,000)	\$2,329
Increase (Decrease)	\$1,322	\$1,356	\$14,665	\$4,177	\$3,073	\$24,563

\$ in 000's

FY24 Long-Term Debt Position

System	Outstanding Bonds	Interest on Bonds	S&P Ratings	Moody's Ratings	Debt Coverage vs. Target
Electric	\$409.3M	\$229.7M	AA- / Stable	Aa2 / Stable	3.18 > 3.00
Natural Gas	71.4M	19.5M	AA / Stable	Aa2 / Stable	3.91 > 3.00
Water	196.5M	81.8M	AAA / Stable	Aa1 / Stable	2.46 > 2.00
Wastewater	452.8M	220.9M	AAA / Stable	Aa2 / Stable	2.02 > 1.50
	\$1,130M	\$551.9M			

FY24 Financial Metrics Performance

Metric	Target	Electric	Gas	Water	Wastewater	Fiber
O&M	Budget or Less	X	✓	X	X	✓
Cash Generated from Operations	Budget or Greater	X	✓	✓	✓	✓
Debt Service Coverage	Financial Plan Target or Greater	✓	✓	✓	✓	---

FY24 Organizational Metrics Performance

Metric	Metric Component Performance					
Safety	✓					
Electric Reliability	✓	X				
Century II	✓	✓	X	✓	✓	✓
Diversity, Equity, and Inclusion	✓					
Call Center Service Performance	✓					
Environmental Stewardship	✓	✓	✓	✓		
Fiber Service Availability	X					

Safety Performance

FY	Serious, Preventable Incidents	Goal
2024	0	0
2023	0	1
2022	2	1
2021	0	2
2020	0	3
2019	1	3

Electric Reliability

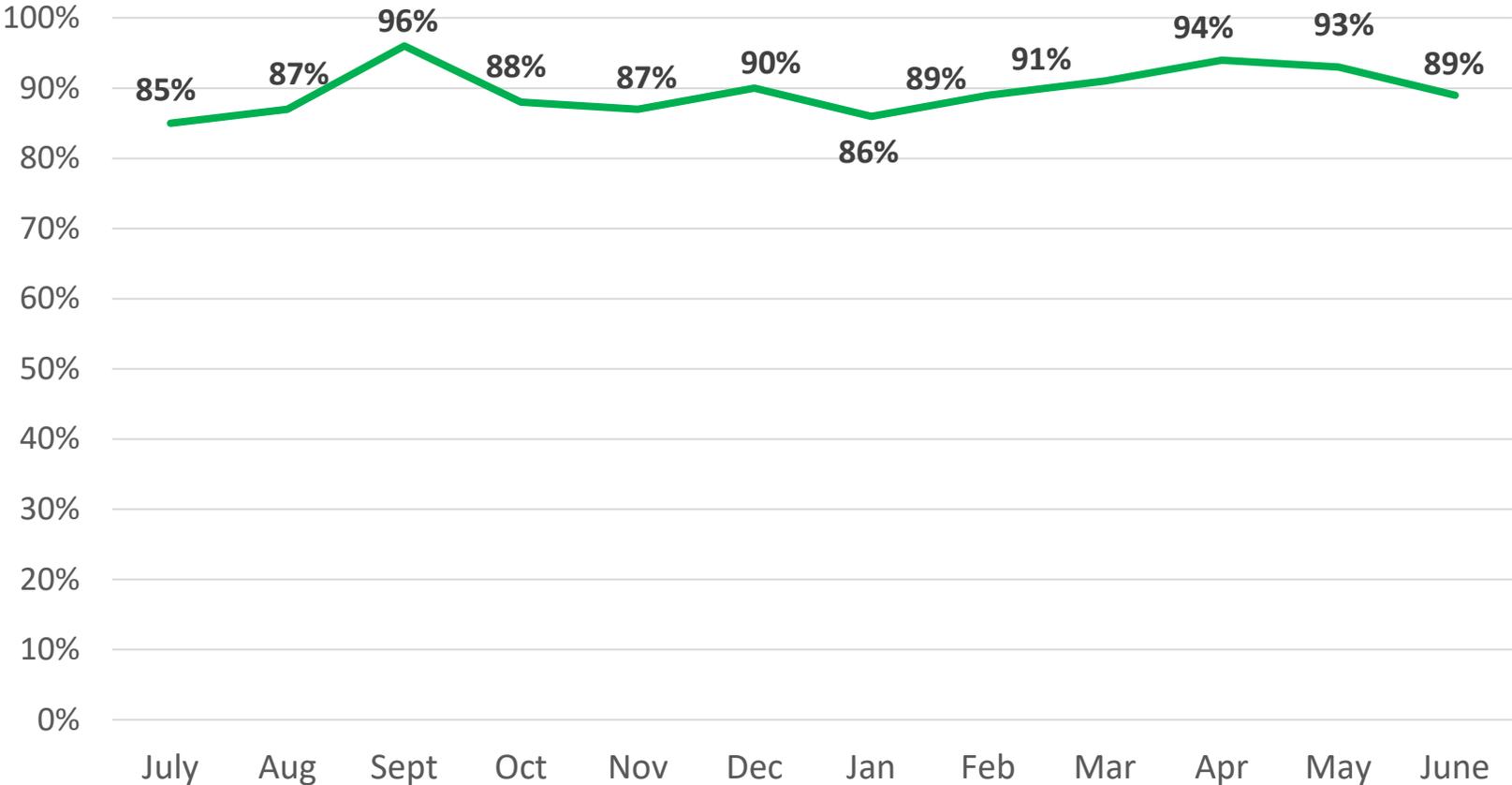
	Avg. Hours w/out Power	Goal Duration (Hours)	Avg. Occurrence w/out Power	Goal Frequency (Events)
FY				
2024	2.00	2.00	1.58	1.45
2023	1.93	2.00	1.33	1.45
2022	1.89	2.05	1.45	1.45
2021	1.83	2.10	1.24	1.50
2020	2.44	1.85	2.01	1.25
2019	2.42	1.85	1.70	1.25

Century II Performance

System	Asset	Goal	Result
Electric	Substation Projects	2 Substations	2 Substations
Electric	Underground Cable	5 Miles	5.9 Miles
Electric	Transmission Lines	9 Miles	6.7 Miles
Natural Gas	Low-Pressure Steel Main Replacement	7 Miles	7.1 Miles
Water	Main Replacement	8.25 Miles	8.3 Miles
Wastewater	Main Replacement	11.5 Miles	13 Miles

Utility Call Center Service Performance

	Goal	Result
% of Calls Answered in 90 Seconds	70%	89%



Environmental Stewardship

Program	Goal	Result
Community Solar Subscription Rate	70%	95%
Weatherization – Homes	≥ 250 Homes	266 Homes
Weatherization – Education	≥ 1,000 Customers	1,273 Customers
WaterSavers	≥ 25 Homes	41 Homes

Tennessee falls behind other Southeast states on solar power, but KUB shines through

Daniel Dassow, Knoxville News Sentinel
Published 5:07 a.m. ET July 18, 2024
Updated 5:08 a.m. ET July 18, 2024

[Solar Power](#)

Add +



Award-Winning Service



Volunteer Group
of the Year





August 15, 2024

Generation Flexibility Update



Generation Flexibility Review

- Authorized by Power Supply Expanded Flexibility Agreement with TVA
- Allows KUB to self-supply 5% of electric load

KUB Program Goals:

- Achieve significant power cost savings
- Advance ESG goal: 400MW of renewable energy by 2030
- Demonstrate KUB's commitment to a cleaner environment



Flexibility Program Details

- KUB flexibility volume =
 - 32.7 MW non-solar **OR**
 - 81.7 MW solar **OR**
 - Some combination of the two
- Interconnection/hosting options
 - KUB interconnected: Local system offsetting TVA power purchase
 - TVA interconnected: Purchased from third-party + TVA reimbursement
 - Aggregated valley partner: Purchased from or in coordination with other LPC
 - End-use customer: Excess generation purchased from customer system

Flexibility Implementation Approach

- Review and assess Generation Flexibility options
- Prioritize local solar potential through competitive procurement
- Supplement local solar with additional sites across Tennessee Valley
- Consider short-term options to fill development gaps
- Align investments with customer service and cost-saving opportunities

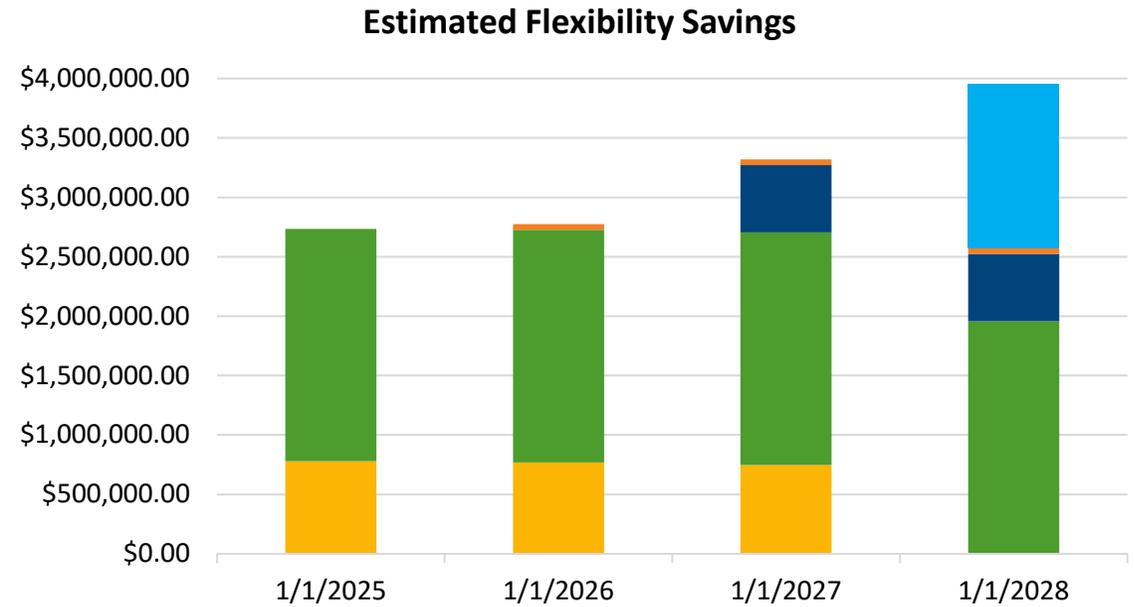
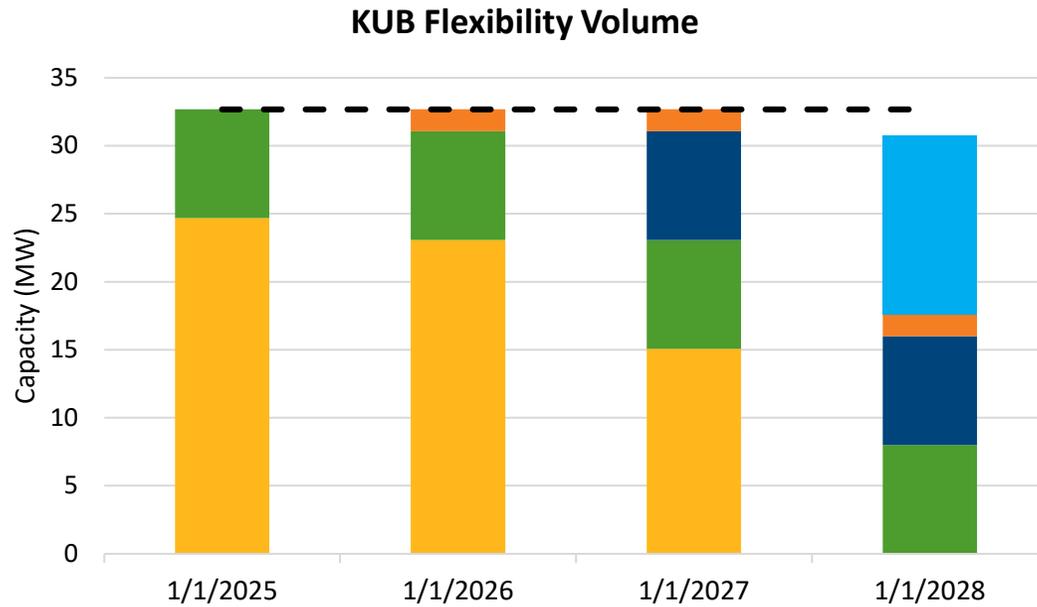
FY25 Board Metric: Contracted Flexibility Volume | 20% Goal

Flexibility Project Preview*

Project	Estimated Capacity	Expected KUB Board Review	Estimated Operation Date
Biomass Project (Three-year short-term)	Non-solar: 15 MW	Fall 2024	October 2024
Green Invest Conversion	Solar: 20 MW	Fall 2024	January 2025
LPC Aggregated Project	Solar: 33 MW	Fall 2024	December 2027
Local Solar Partnership	Solar: ~20 MW	Winter 2024	December 2026
Small Solar Site(s)	Solar: ~4 MW	Winter 2024	December 2026

*All projections are preliminary estimates and subject to change pending final agreements.

Flexibility Project Preview*



■ Biomass ■ Golden Triangle ■ Local Large ■ Local Small ■ LPC Aggregate

*All projections are preliminary estimates and subject to change pending final agreements.

Next Steps

1. Finalize agreements with project partners and TVA
2. Present project agreements to KUB Board for review and authorization
3. Monitor project implementation and performance



August 15, 2024

Drinking Water Regulatory Revision



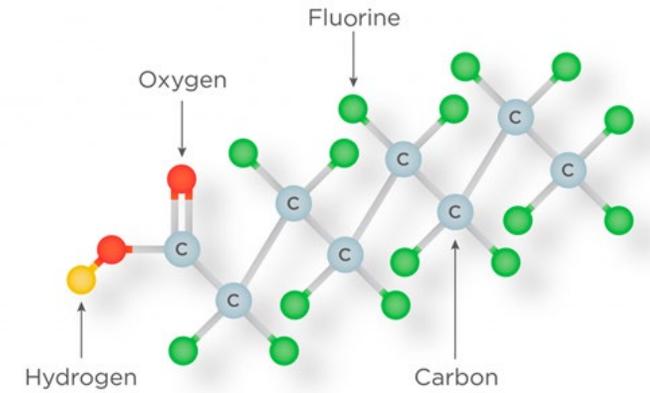
EPA Drinking Water Regulatory Revision

- Final national primary drinking water regulation for six per-and polyfluoroalkyl substances (PFAS)
- Requires routine monitoring and reporting
- Compliance with a maximum contaminant level (MCL)
- Additional treatment as needed



Per- and Polyfluoroalkyl Substances (PFAS)

- A class of thousands of synthetic chemicals
- Production started in the 1940s
- Common uses have included:
 - Factory- or consumer-applied coating to repel water, oil, and stains on textiles and leathers
 - Fast food containers
 - Electrical wiring insulation and coatings
 - Photo-resistant and anti-reflective coatings
 - Corrosion prevention in metal plating and etching
 - Firefighting foams



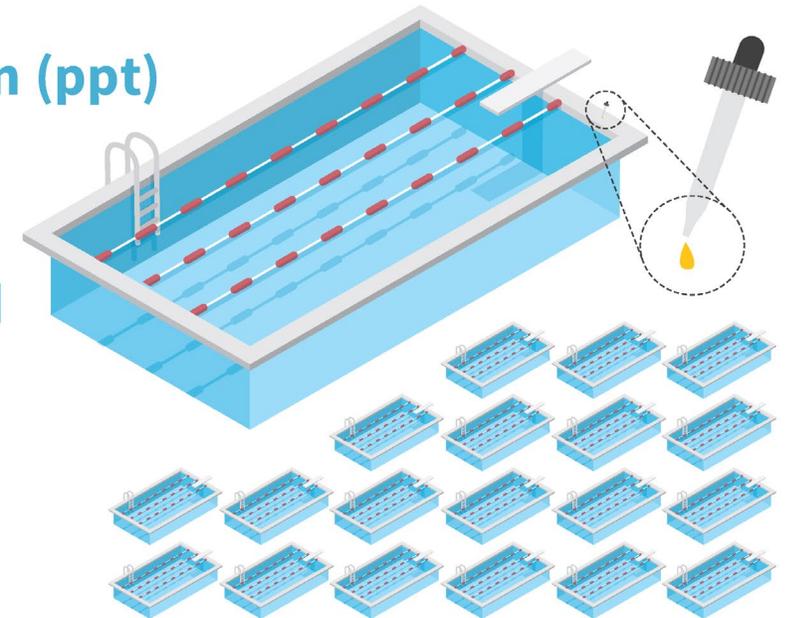
Increased PFAS Attention

- Class action settlements
- Public health concerns
- Public water system occurrence data
- EPA's PFAS Strategic Roadmap
- Regulatory changes
- Method and technology advancements

1 part per trillion (ppt)

IS EQUIVALENT TO A
SINGLE DROP OF
WATER IN

**20 olympic-sized
swimming pools**



PFAS Monitoring Schedule

July 2013

- EPA's UCMR-3
- 6 PFAS

October 2023

- TDEC Source Water Monitoring

January 2024

- EPA's UCMR-5
- 29 PFAS

October 2024

- Final UCMR-5 sampling

April 2029

- Routine monitoring
- Rule compliance

Regulated PFAS Monitoring Results

Parameter	Rule Maximum	Source Water	2013 Tap Water	2024 Tap Water
PFOA	4 ppt	< 4ppt	Non-Detect	Non-Detect
PFOS	4 ppt	< 4ppt	Non-Detect	Non-Detect
PFNA	10 ppt	< 10ppt	Non-Detect	Non-Detect
PFHxS	10 ppt	< 10ppt	Non-Detect	Non-Detect
GenX	10 ppt	< 10ppt	Non-Detect	Non-Detect
Mix of 2 or more (includes PFBS)	Hazard Index of 1	Not Applicable	Not Applicable	Not Applicable

KUB in Compliance

- No compliance concerns with recent rule revisions
- No additional treatment
- Continue routine monitoring and reporting
- Results available in the annual water quality report
- Continue to promote protection of local waterways
- Increase public awareness



Reducing PFAs



Poly- and Perfluoroalkyl Substances (PFAS) are man-made chemicals that are resistant to breaking down in the environment and may have adverse health effects. Although these compounds are not currently regulated, unregulated monitoring in 2024 has not indicated any detectable levels in KUB's drinking water. To learn more about the many sources of PFAS and how to reduce the risk of exposure, please visit www.epa.gov/pfas for more information.



August 15, 2024

TeenWork Program



Program Successes

- Completed 29th year of program
- More than 550 students have successfully completed the program
- Current TeenWork alumni employed at KUB
 - 13 full-time
 - Five part-time students
- 2024 class is largest in program history
 - 37 students completed workshops / 33 students placed for employment
 - KUB: 20
 - Covenant Health: 8
 - First Utility District: 3
 - West Knox Utility District: 1
 - Chamber of Commerce: 1



TEENWORK

2023-2024 Highlights

- Expanded to South-Doyle High School
- Engaged with Knox County Schools as a model business partner for 865 Academies
- Welcomed largest group of Spanish speaking students



Austin-East High School



Central High School



South-Doyle High School



Fulton High School

Piloted Operations & Maintenance Rotation

- Five department rotation
 - System Operations, Plant Operations, Vegetation Management, System Maintenance Services – Pipes, and System Maintenance Services – Wires
- Increases capacity for number of students
- Provides additional hands-on experience and exposure
- Students enjoyed variety of work and gained more comprehensive knowledge of KUB operations



Looking Ahead: 2024-2025

- Celebrating 30 years!
- Zoo Knoxville as business partner
- Identifying additional schools for future expansion based on academy fit





August 15, 2024

Award Recognitions



KUB Retains American Public Gas Association SOAR Gold Level

- Honors commitment to excellence in four areas:
 - System integrity
 - System improvement
 - Employee safety
 - Workforce development
- Recognition is for three years
- KUB was first recognized in 2018; achieved Gold level in 2021
- Retaining Gold level for 2024-2026
 - Perfect 100 application score!



APGA Personal Achievement Award

- Jocelyn McInturff, Director, Safety and Regulatory Compliance
- In recognition of substantial contributions to the goals of APGA and the natural gas industry



APGA Next Generation Employee Achievement Award

- Ben Carey, Manager, Gas Systems Engineering
- Recognizes individual 35 years old and younger who has made substantial contributions to the goals of their utility, APGA, and the natural gas industry



Tennessee Society of Professional Engineers Young Engineer Award

- Drew Keller, Engineer, Water Systems Engineering
- Honors members 35 years old or younger who have made outstanding contributions to the engineering profession and their communities



KUUB

KNOXVILLE
UTILITIES BOARD

