



June 12, 2025

Authorization of Green Invest Golden Triangle Tranche Amendment

Resolution 1510



Green Invest Portfolio

- Initial agreement executed in 2020 with subsequent project tranches
- Reduces carbon footprint for KUB customers by investing in new-to-the-world solar
- Located in the Tennessee Valley outside KUB service territory

Project	Initial Delivery Date	Capacity
Golden Triangle I (Columbus, MS)	1/20/2025	50 MW → 62 MW
Optimist (West Point, MS)	1/31/2026	200 MW
Tullahoma (Tullahoma, TN)	4/30/2027	55 MW
Total		305 MW → 317 MW

Golden Triangle I



- Came online in January 2025
- Developed by Origis Energy in Columbus, MS
- Installed capacity
 - Solar: 200 MW alternating current (ac)
 - Storage: 50 MWac
- 50 MW Green Invest commitment
 - Proposed Increase: 12 MW
- 20 MW Flexibility conversion
 - \$600,000 savings through April

Golden Triangle I - Tranche Amendment

- TVA shared opportunity to increase Golden Triangle I capacity
- Requires tranche amendment to purchase additional 12 MW at \$4.50 per renewable energy credit (REC)
- RECs intended to support new offering for KUB customers with carbon reduction goals
- Positions KUB to achieve ESG goal of supporting 400 MW of renewable energy by 2030
- Total Green Invest portfolio will represent 11% of KUB electric load

Resolution 1510

- Authorizes execution of Green Invest Tranche Amendment with TVA for the purchase of an additional 12 MW of Golden Triangle capacity
- Permits President and CEO to take actions to carry out terms of the executed amendments
- Takes effect upon passage by the Board



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Authorization of Flexibility Power Purchase Agreement – DG Knoxville TN, LLC

Resolution 1511

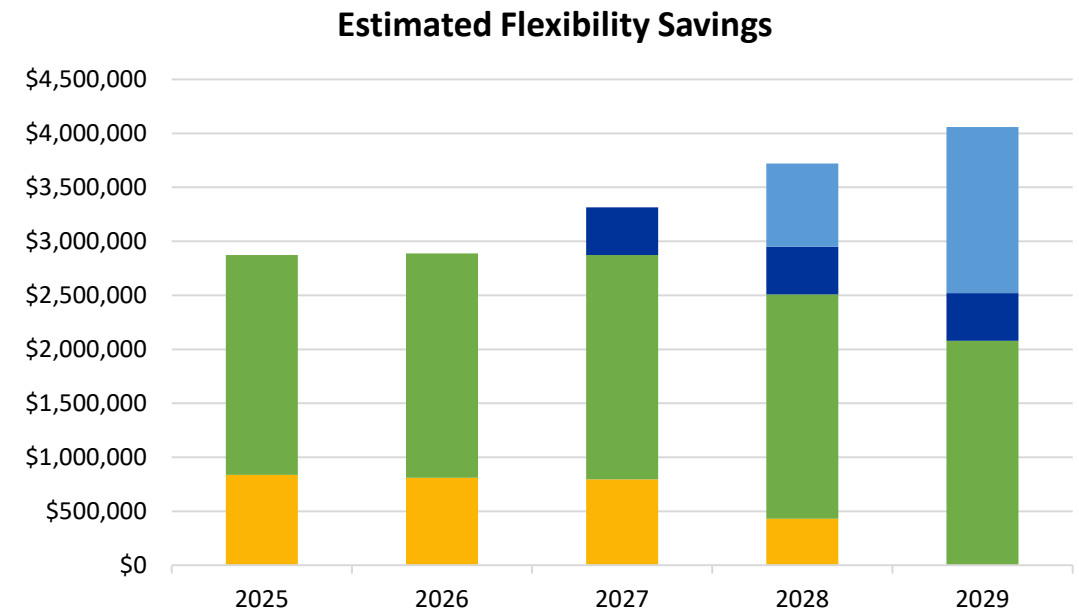
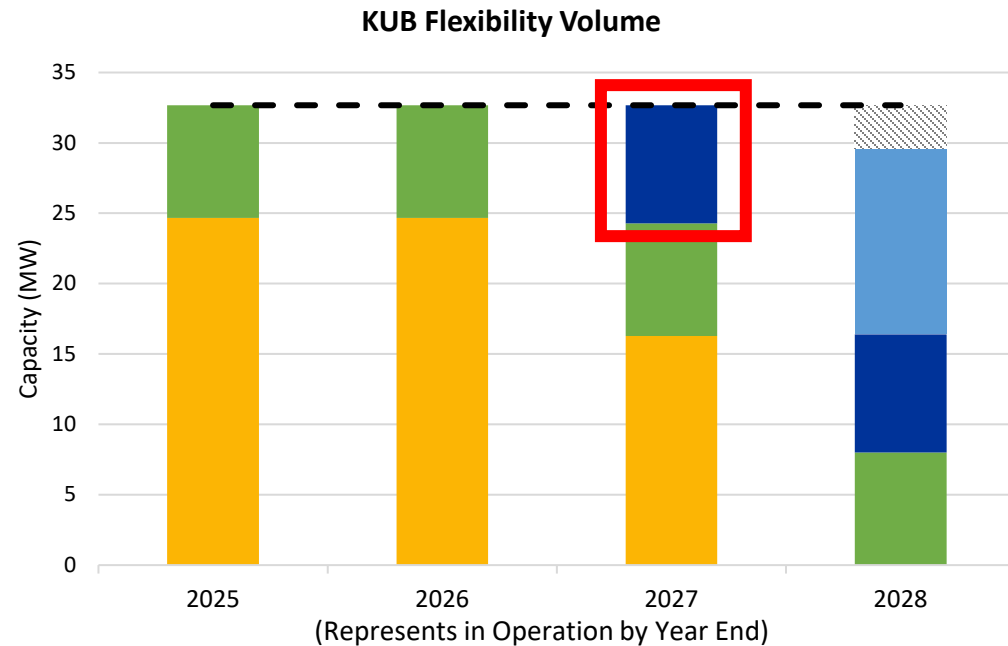


Generation Flexibility Project Preview*

Project	Estimated Capacity	Expected KUB Board Review	Estimated Operation Date
Biomass Project (Three-year short-term)	Non-solar: 32 MW → 15 MW (tiered)	Approved	December 2024
Golden Triangle Green Invest Conversion	Solar: 20 MW	Approved	January 2025
Durhamville LPC Aggregated Project	Solar: 33 MW	Approved	Summer 2028
Cemex Local Solar Partnership	Solar: 21 MW	June 2025	Summer 2027
Remaining	Solar: ~8 MW	TBD	TBD

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

Generation Flexibility Project Preview*



■ Biomass ■ Golden Triangle ■ Cemex (local) ■ Durhamville ▨ Available

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

Flexibility Power Purchase Agreements

Local flexibility projects interconnected to KUB's distribution system only require agreement with developer

Power Purchase Agreement (PPA) →

Developer will develop, own, and operate system and sell power to KUB

Savings result by offsetting energy purchased from TVA with lower cost, locally generated power

DG Knoxville TN, LLC: 21 MW Solar

- Local project in partnership with Cemex; providing land in exchange for renewable energy credits
- DG Knoxville TN, LLC selected through KUB's competitive RFP process to develop, own, and operate the project
- 20-year PPA term begins upon expected completion in summer 2027 with KUB option to extend
- Price/MWh fixed for 20 years with price reduction upon extension
- PPA includes provisions to address initial due diligence activities and potential market changes
- Net annual KUB savings = Est. \$450,000

Resolution 1511

- Authorizes execution of a PPA to purchase produced electricity and renewable energy credits of a 21 MW solar project from DG Knoxville TN, LLC
- Permits President and CEO to make minor revisions to the PPA in the best interest of KUB and its customers
- Takes effect upon passage by the Board

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MBW West Filters Project Preparing for Startup



Project Scope Refresher

- Six new filters (11-16)
- Washwater tank and filter backwash capability
- Water equalization for management of backwash
- West control room and lab
- Intermediate wet well and pump station
- Intermediate tie-ins with applicable chemical feeds



Rendering of finished project

Operational Benefits of the West Filters

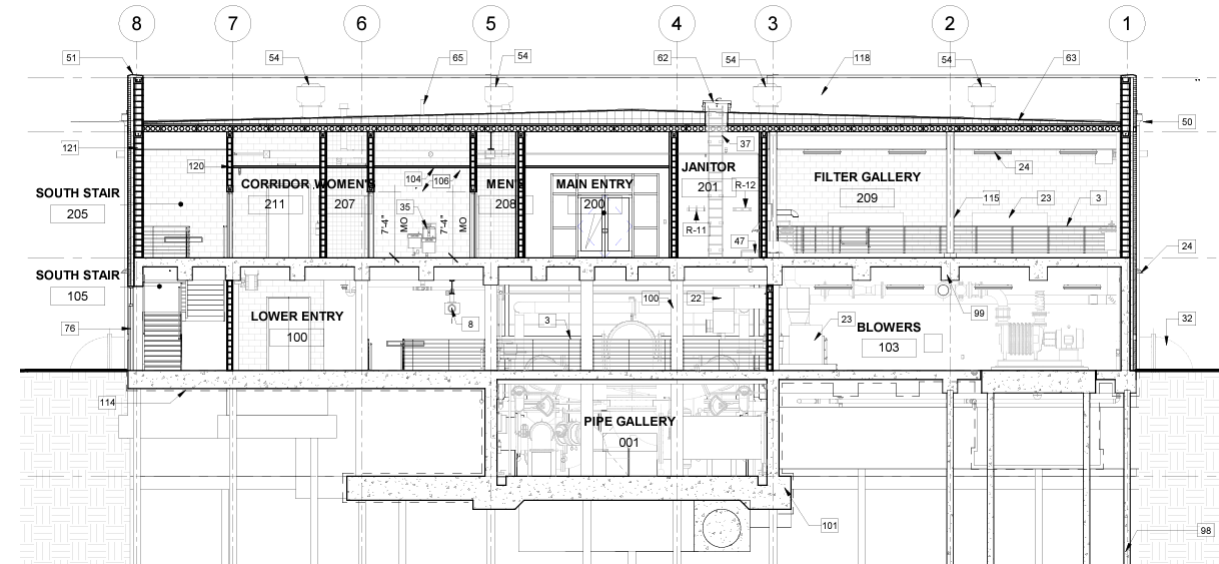
- Redundancy
 - Maintenance
 - Planned/unplanned shutdowns
- Resiliency
 - Additional treatment “train”
- Water quality benefits
 - Sixteen filters instead of ten



View of the West Filter Building construction from one of the staged, 42" intermediate pipes

Operational Complexity

- Planning is critical
 - Additional train **must meet same water quality goals**
- Preparations to include:
 - Regulatory
 - Asset management
 - Operator qualification
 - Safety
 - Procedures
 - Start-up sequence



View of a West Filter Building drawing

Where Are We Now

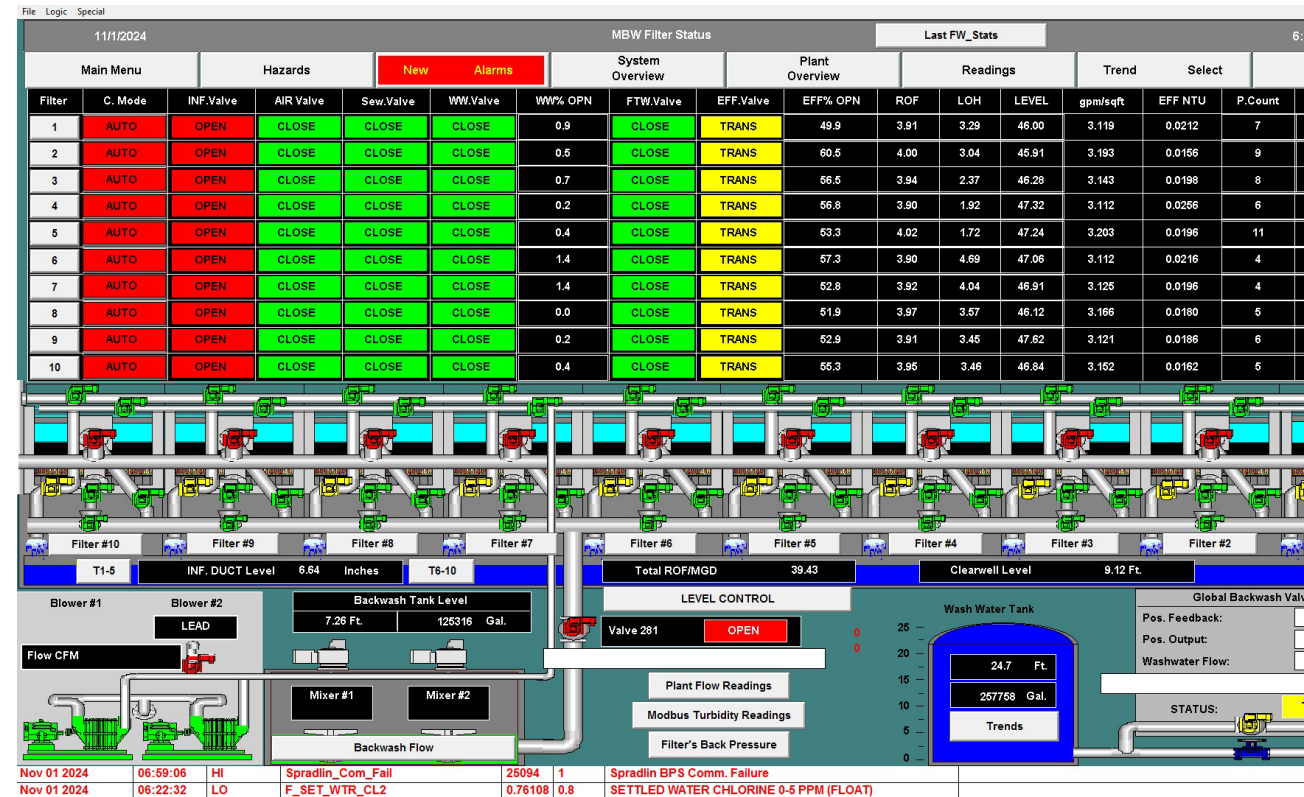
- Recently, contractors performed tie-ins to existing intermediate lines on MBW plant property
- Operational planning currently ongoing
 - Naming conventions
 - Roles and responsibilities
 - SCADA screen reviews
 - Progress tours for operators
- Construction completion
 - Late fall 2025
- Startup and proving in the following months



Tie-ins to existing MBW intermediate lines

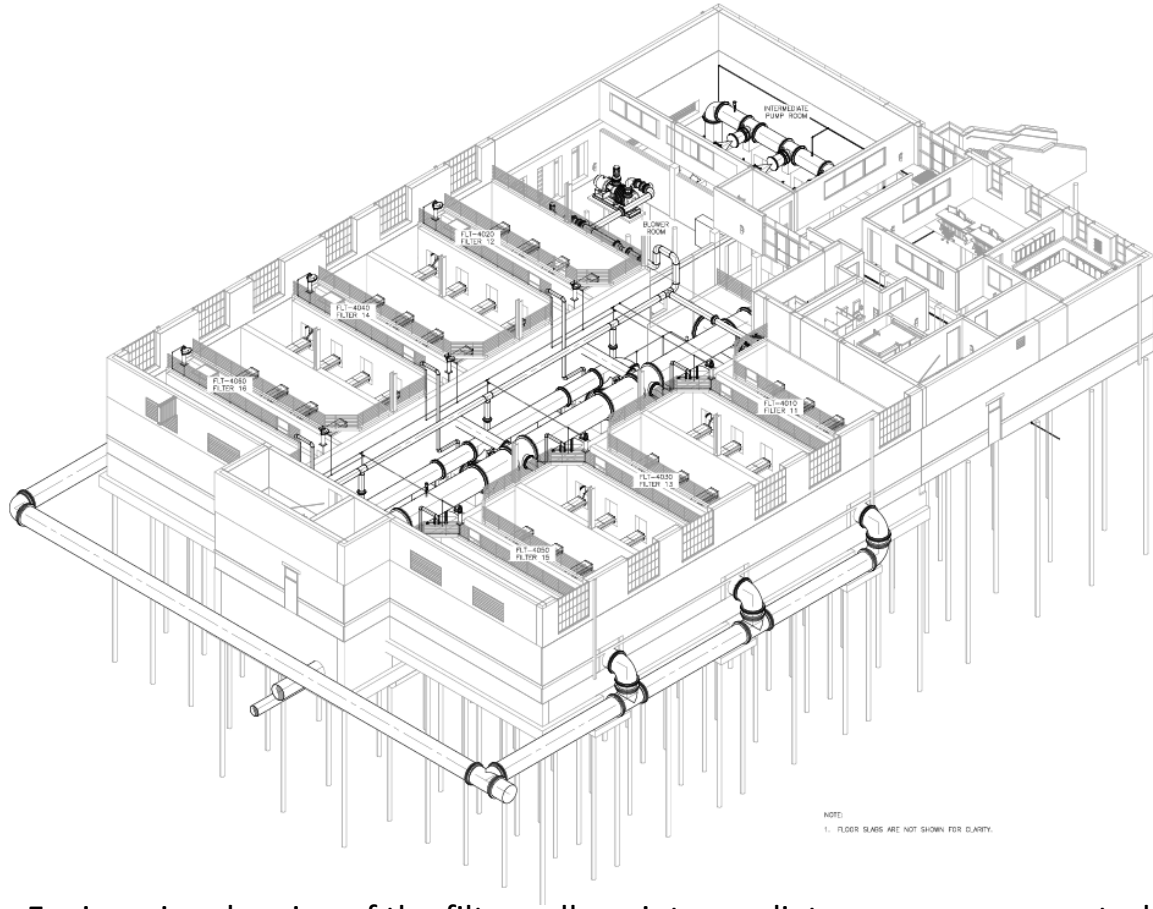
Preparing for the Transition

- Bi-weekly planning meetings:
 - Plant Operations
 - Water Engineering
 - SCADA
- Designation of a senior operator
 - Site visits and tours
 - Training
 - Operator qualification
 - SOPs
 - Naming conventions



SCADA screenshot of existing filter process area

Regulatory Preparation



Engineering drawing of the filter gallery, intermediate pump room, control room, lab, etc.

- Regulatory needs associated with a plant start-up
 - TDEC notification prior to startup
 - Possible TDEC site visit
 - Certifications from the National Sanitation Foundation (NSF)
 - Disinfection, certification, and applicable bacteriological results
 - Calibration records for new online and benchtop instrumentation

Project Closeout Process



Washwater tank and a filter control valve

- Led by Plant Operations, also includes:
 - Water Engineering
 - Maintenance
- Ensures a successful transition to a new process area:
 - Safety
 - Documentation (SOPs, training, drawings)
 - Mapping
 - Maintenance work orders
 - Asset management
 - Replacement inventory

Procedures, Training, & Qualification

- Develop procedures for each new process area
- Modify existing procedures
- Modify plant “rounds and readings” to incorporate new west operational process areas
- Chemical dosing procedures to ensure a consistent and quality product
- Qualification (OQ) modules for new processes:
 - Filter operations
 - Isolation of a treatment train
 - Chemical dosing



Two KUB UGC employees operate an intermediate valve

Filter Start-Up

- Engineering firm to assist with startup sequencing
- Initial filter start-up will be individually
 - Filtration will begin, but not for finished water
 - Multiple filter cycles or until water quality goals are met and maintained
- Test filter wash cycles for each filter
- Filter performance testing
- Chemical dosing



A valve in the intermediate piping area of the West Filters Building

Preparation Timing

[illegible]

Summary

- West filter operations
 - Resiliency and redundancy
- Startup – early 2026
 - Regulatory requirements
 - Project closeout
 - Training and qualification
 - Startup
- Questions?



Pipe hangers, piping, and other construction activities occurring within the filter pipe gallery



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Employee Recognition



KUB Employees Assist with Injury Response

- Justin Clifton and Dillion Thomas (New Service)
 - Installing tankless water heater for customer
 - Customer's father fell and sustained a shoulder injury
 - Both rushed to assist
 - Compassion and quick response made a meaningful impact



"They were comforting...just so wonderful and caring making sure I was ok." – Mr. F. Williams



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