2020 ECR Plan Status Update Report
Quarterly Report – Update #23
September 30, 2026

Executive Summary:

General

This report covers LG&E and KU's ("Companies") progress on the 2020 Environmental Cost Recovery ("ECR") Plan through the third quarter of 2026. The Companies filed applications requesting approval of their 2020 ECR Plan on March 31, 2020[1] and received approval on September 29, 2020.

Safety performance to date remains excellent with an Inception-to-Date OSHA Recordable Incident Rate of 0.21 compared to the industry average of 2.4. The safety performance through the third quarter of 2026 was excellent, achieving an OSHA Recordable Incident Rate of 0.00.

The Trimble County ("TC") Effluent Limitation Guidelines ("ELG") system and the Ghent ("GH") Bottom Ash Transport Water system achieved Commercial Operations in the second quarter of 2024. The Mill Creek ("MC") ELG system achieved Commercial Operations in the second quarter of 2025. The GH ELG system achieved Commercial Operations in the fourth quarter of 2025. Engineering, procurement and construction work continued for additional ultrafiltration ("UF") Skids at all three sites, due to UF challenges creating transmembrane pressure trips.

Compared to the total 2020 ECR Plan projected cost of $405.2 million (net)[2], as provided in Case Nos. 2020-00060 (KU) and 2020-00061 (LG&E), the projected spend, as of the third quarter of 2026 is now $325.4 million (net)[2]. This projected spend represents a $79.8 million (net) reduction from the original filing. The total spend-to-date through September 30, 2026 is $293.8million (net)[2].

Background

The Environmental Protection Agency's ("EPA") 2015 ELG Rule and amendments precipitated the need to construct ELG water treatment systems at TC, MC and GH, as well as a Bottom Ash Transport Water ("BATW") recirculation system at GH. The EPA's proposed amendments to the 2015 ELG Rule were finalized in the Fall of 2020. The current ELG Rule includes daily maximum and monthly average limits for the concentration of mercury, nitrates/nitrites, selenium and arsenic allowed in Flue-Gas Desulfurization ("FGD") wastewater effluent.

To meet the revised limits for these constituents, the Companies are required to install ELG water treatment systems to treat the effluent from the physical/chemical FGD process water treatment systems recently placed into service as described in the 2016 ECR Plan quarterly reports. Without the proposed 2020 ECR Plan projects at TC, MC, and GH stations, the Companies would not be able to continue steam generating operations at these generating stations and simultaneously comply with the ELG Rule, as enforced by

[1] Case No. 2020-00060 and Case No. 2020-00061
[2] Co-Owners of the Trimble County plant: Illinois Municipal Electric Agency (IMEA) and Indiana Municipal Power Agency (IMPA) are responsible for 25%. IMEA owns 12.12% and IMPA owns 12.88%. Co-owner shares are not included in the costs provided in this report.

Kentucky Pollutant Discharge Elimination System ("KPDES") permits at each generating station. This would significantly impair the Companies' ability to fulfill their mandate to provide adequate, efficient, and reasonable service to their ratepayers, as these generating stations are the three largest generating stations within the Companies' generating fleet. The ELG Rule requires compliance for the FGD wastewater as soon as possible on or after November 1, 2020, but no later than December 31, 2025.[3]

The final ELG Rule also includes up to 10 percent volumetric discharge limit (on a 30-day rolling average) for BATW, which also must be complied with "as soon as possible" but in no event later than December 31, 2025. This discharge limit requires KU to construct a BATW recirculation system on the existing bottom ash transport system at GH (now in operation). The recirculation system collects the transport water previously discharged from the remote bottom ash dewatering facility and reroutes it through tanks and piping systems back to the four generating units for reuse. TC and MC do not require a BATW recirculation system due to their bottom ash transport systems being previously converted to a dry transport instead of a wet sluicing system like GH's.

On May 9, 2024, the EPA promulgated the final ELG Rule requiring membrane filtration followed by solidification or thermal evaporation for Zero Liquid Discharge ("ZLD") of FGD Wastewater; zero discharge of Bottom Ash Transport Water; and zero discharge of combustion residual leachate waters and did not establish specific limitations for Legacy Waste Water as the permitting authority will be responsible to establish site-specific technology-based limits. The ELG stipulates compliance as soon as possible, but no later than December 31, 2029. The ELG also creates a 2034 Permanent Cessation of Coal Combustion ("PCCC") subcategory. To qualify for the 2034 PCCC, facilities were required to file a Notice of Planned Participation ("NOPP") by December 31, 2025 committing to retire all coal-fired units by December 31, 2034. The EPA has set interim limits based on the 2020 ELG, and all facilities must fully comply starting on their respective 2020 ELG applicability date, until their 2024 ELG applicability date, or their 2034 PCCC retirement date. The Companies are currently reviewing the final ELG rule and are formulating a compliance strategy.

On December 23, 2025, EPA promulgated the Deadline Extensions Rule. The NOPP filing deadline to commit to the 2034 PCCC was extended six (6) years to December 31, 2031. The ZLD compliance deadline was extended five (5) years to December 31, 2034. Several parties filed petitions to challenge the Deadline Extensions Rule which were consolidated in the United States Court of Appeals for the Second Circuit.

Because of the uncertainties of the final ELG rule, the Companies expect legal challenges to the ELG. Respective outcomes may influence future compliance direction.

[3] 84 Fed. Reg. 64664.

Schedules

FGD Process Water Treatment Facilities and Diffusers

Project	Project #	Awarded Contractor	Status[4]	Actual In-Service Date
Trimble County Effluent Limitations Guidelines Water Treatment System[5]	KU Project 44 LG&E Project 32	OKEP	Awarded March 15, 2021	Placed in service May 2024[6]
Mill Creek Effluent Limitations Guidelines Water Treatment System[5]	LG&E Project 31	OKEP	Awarded March 15, 2021	Placed in service April 2025[6]
Mill Creek Outfall 025 Diffuser	LG&E Project 31	Tetra Tech	Awarded May 12, 2021	Placed in service December 2021
Ghent Effluent Limitations Guidelines Water Treatment System[5]	KU Project 43	OKEP	Awarded March 15, 2021	Placed in service[6] December 2025
Ghent Bottom Ash Transport Water Recirculation System[7]	KU Project 43	OKEP	Awarded March 15, 2021	Placed in service May 2024[6]
Ghent Outfall 001 Diffuser	KU Project 43	MAC Construction & Excavating	Awarded March 22, 2021	Placed in service December 2021

[4] Project Engineering Department or Engineering, Procurement, and Construction ("EPC") Contract work status.

[5] ELG Equipment OEM: Frontier

[6] Project was placed into service. Charges will continue to accrue in 2026 and into 2027 due to project close-out activities.

[7] BATW Equipment OEM: United Conveyor Corporation

Quarterly Status Update:

General

The engineering, procurement, and construction ("EPC") contracts for TC, MC, and GH were awarded on March 15, 2021 to Old Kentucky Energy Partners ("OKEP"), which is a joint venture between Bowen Engineering (a local company) and United E&C. Due to UF challenges creating transmembrane pressure trips, additional UF Skids are being installed at all three stations.

Burns & McDonnell ("B&McD") is the ELG Owner's Engineer and is assisting the Companies with reviewing the few remaining submittals and the minimal remaining fieldwork by the EPC (OKEP) and ELG technology providers (Frontier – ELG) or United Conveyor Corporation (Ghent BATW).

KU Project 44 and LG&E Project 32 – Trimble County (TC) Station Effluent Limitations Guidelines (ELG) Water Treatment System

General

Project 44 (KU) and Project 32 (LG&E) are for construction of an ELG water treatment system at the TC generating station. The current forecasted capital costs to implement these facilities is $64.9 million (net)[8], allocated between KU and LG&E.

ELG

The ELG system was constructed in close proximity to the process water treatment system ("PWS"). All facilities were installed on land owned by KU and LG&E at the generating station. The system is designed to handle water flow capacity up to 750 gallons per minute. The EPC contractor completed all as-built drawings, but will amend to incorporate the additional UF Skid.

Commercial Operation of the ELG system was achieved during the second quarter of 2024. Design for an additional UF Skid was completed and the procurement and construction work for the additional UF Skid was initiated this quarter.

B&McD continued providing engineering support for the required modifications to the TC1 oxidation air system previously noted. The new oxidation air blowers installation was completed by Bowen during the second quarter.

LG&E Project 31 – Mill Creek (MC) Station Effluent Limitations Guidelines (ELG) Water Treatment System and Diffuser

[8] KU's 48 percent ownership allocation equals $35.7 million (Project 44) and LG&E's 52 percent ownership allocation equals $38.7 million (Project 32) – both costs are net.

General

Project 31 is for construction of an ELG water treatment system and wastewater diffuser at the MC generating station. The current forecasted capital costs to implement this project is $74.6 million.

ELG

Commercial Operation of the ELG system was achieved during the second quarter of 2025. Record drawing turnover packages are complete, but will be amended to incorporate the additional UF skids. Procurement work was initiated and concrete equipment pads were installed for the two additional UF skids this quarter.

Diffuser

The diffuser was installed and placed into service in 2021.

KU Project 43 – Ghent (GH) Station Effluent Limitations Guidelines (ELG) Water Treatment System, Bottom Ash Transport Water (BATW) Recirculation System, and Diffuser

General

Project 43 is for construction of an ELG water treatment system, a BATW recirculation system, and a wastewater outfall diffuser at the GH generating station. These facilities are designed to process and lawfully discharge wastewater from GH in accordance with the EPA's existing and proposed amendments to the ELG Rule and the existing Kentucky Pollutant Discharge Elimination System ("KPDES") Permit for GH. The current forecasted capital costs to implement these facilities are $185.9 million, with construction completed for each of the BATW recirculation system, ELG water treatment system, and wastewater outfall diffuser. Subsequent to placing the BATW system and ELG system in service, a thorough water balance analysis utilizing data gathered from in-service systems was performed. As a result, an additional method to utilize BATW as feedwater to the limestone slurry preparatory system was evaluated and will be designed and installed. This project will provide much needed resilience to the system, particularly for low load scenarios that impact the BATW water balance due to decreased BATW water use in the Flue Gas Desulphurization system.

ELG

Commercial Operation of the ELG system was achieved during the fourth quarter of 2025. The additional UF Skid was set on the equipment pad and piping installation was started this quarter. Additionally, the engineering of a reliable power supply to the PWS/ELG facilities due to previous issues with the existing overhead supplies was awarded and engineering work started this quarter.

Bottom Ash Transport Water ("BATW")

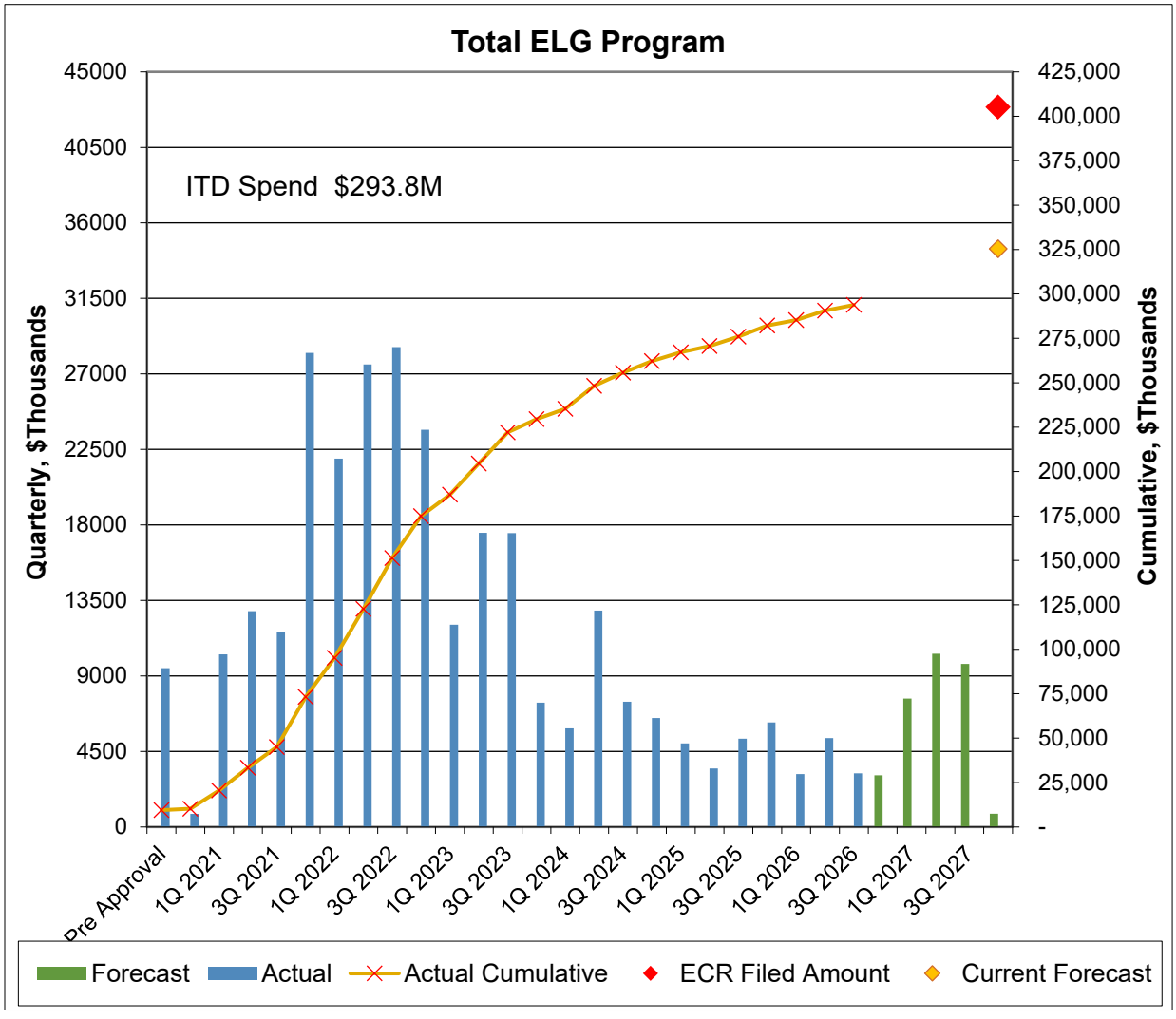
The BATW was installed and placed into service in 2024. The engineering of additional BATW surge capacity (limestone slurry preparation tank) to alleviate water balance concerns identified during testing and operations of the BATW system was awarded and engineering work was started this quarter.

Diffuser

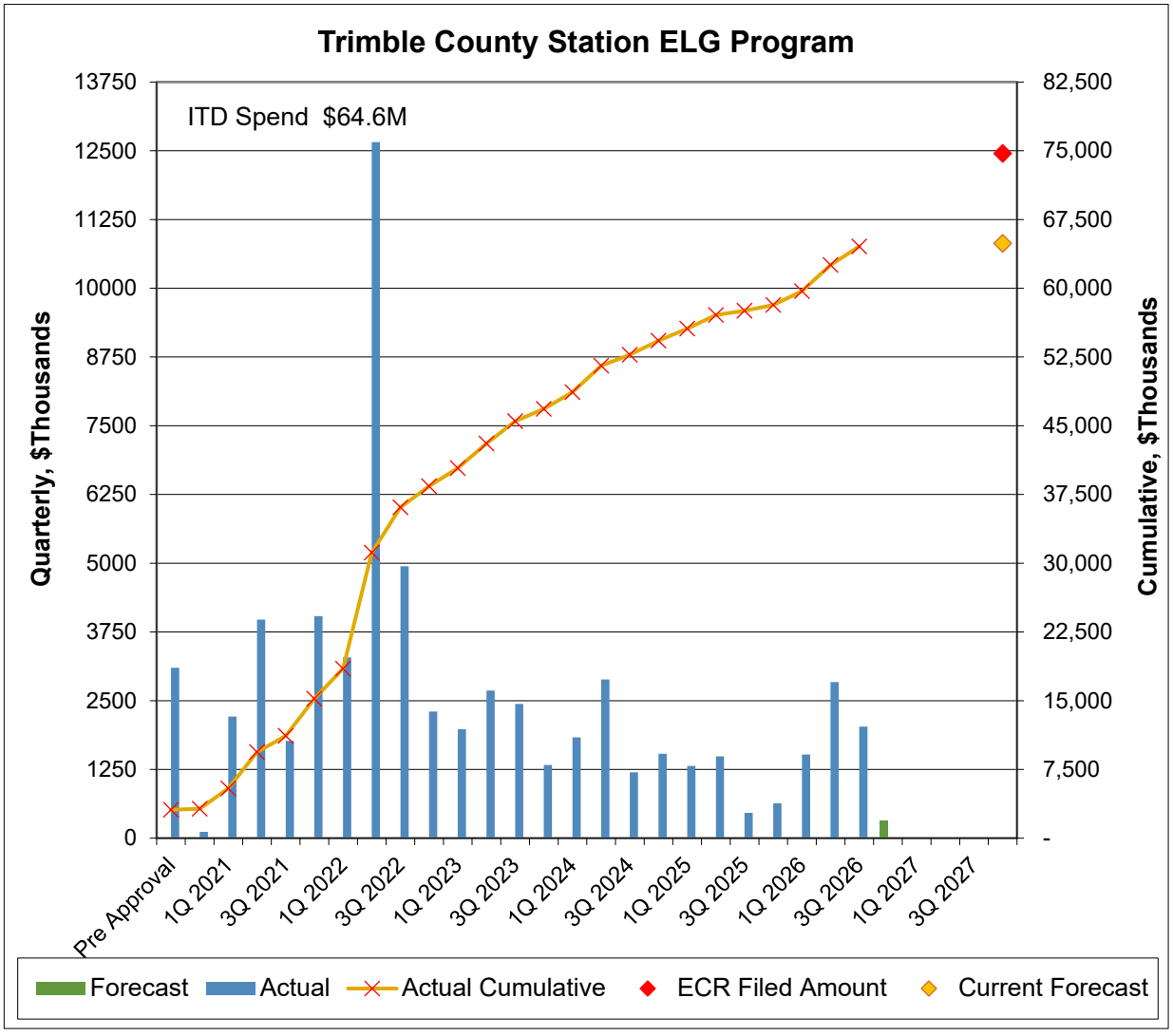
The diffuser was installed and placed into service in 2021.

Financials:

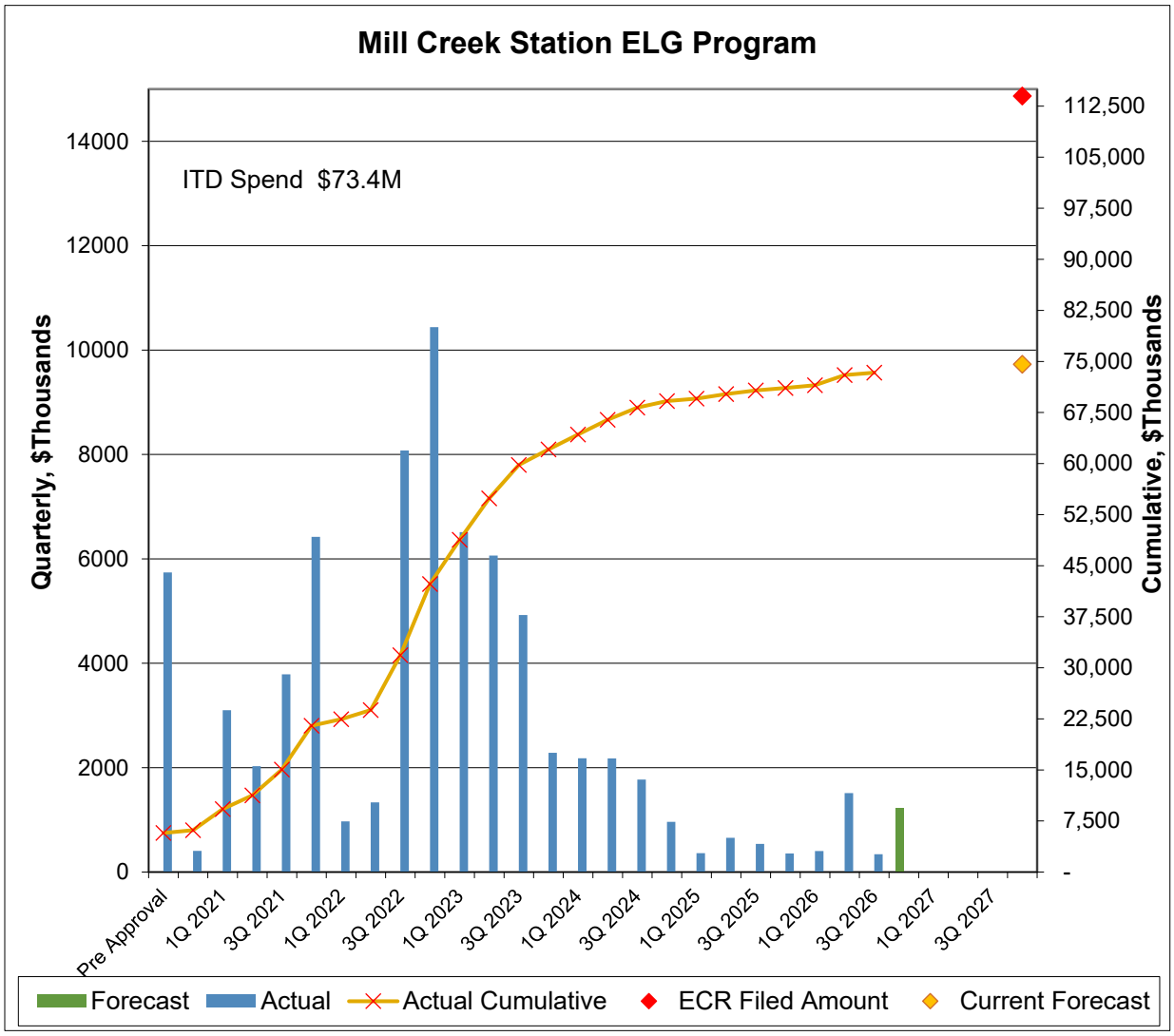
As previously reported, the total 2020 ELG Program approved forecasted cost was over $405 million (net). As noted in prior quarterly reports, this forecasted cost was reduced significantly. The currently projected spend of $325.4 million (net) remains well below the filed amount. Total spend-to-date through September 30, 2026 is $293.8 million (net)[2]. The graph below includes: 1) a symbol (◆) to show the current forecast to completion and 2) inception-to-date ("ITD") spend in the upper left of the chart.



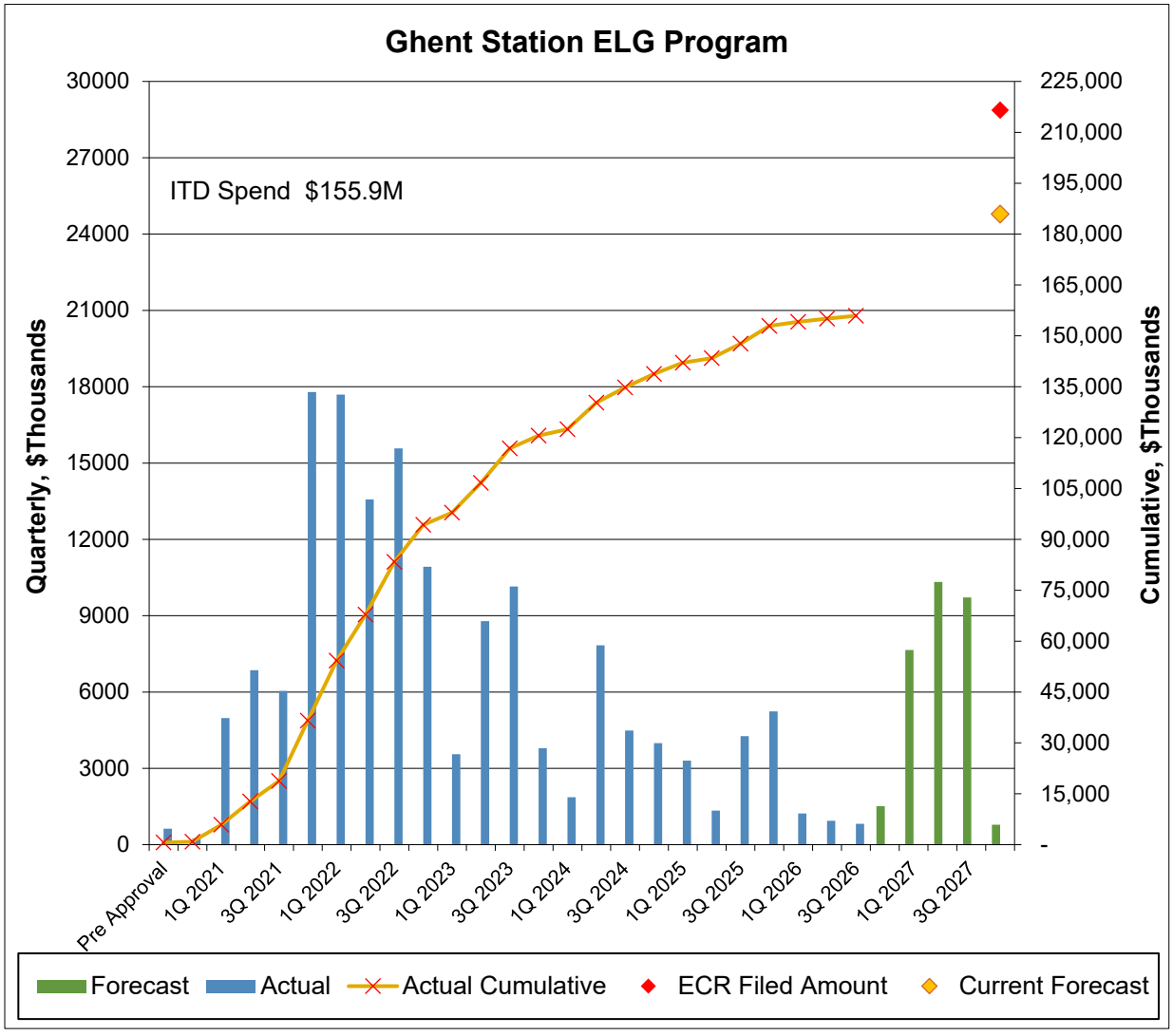
The total Trimble County Station ELG Program forecasted cost is now $64.9 million (net)[2]. Total spend-to-date through September 30, 2026 is $64.6 million (net)[2]. The graph below includes: 1) a symbol (◆) to show the current forecast to completion and 2) inception-to-date ("ITD") spend in the upper left of the chart.



The total Mill Creek Station ELG Program and Diffuser forecasted cost is now $74.6 million. Total spend-to-date through September 30, 2026 is $73.4 million. The graph below includes: 1) a symbol (◆) to show the current forecast to completion and 2) inception-to-date ("ITD") spend in the upper left of the chart.



The total Ghent Station ELG Program, BATW, and Diffuser forecasted cost is now $185.9 million. Total spend-to-date through September 30, 2026 is $155.9 million. The graph below includes: 1) a symbol (◆) to show the current forecast to completion and 2) inception-to-date ("ITD") spend in the upper left of the chart.



Planned Activities for Next Quarter:

KU Project 44 and LG&E Project 32 – Trimble County (TC) Station Effluent Limitations Guidelines (ELG) Water Treatment System

ELG – The Unit 1 oxidation air system modification project punchlist items will be completed. Procurement work for the additional UF Skid will continue. The additional UF Skid will be delivered to site.

LG&E Project 31 – Mill Creek (MC) Station Effluent Limitations Guidelines (ELG) Water Treatment System and Diffuser

ELG – The two additional UF skids will be installed and commissioned.

Diffuser – No further work expected.

KU Project 43 – Ghent (GH) Station Effluent Limitations Guidelines (ELG) Water Treatment System, Bottom Ash Transport Water (BATW) Recirculation System, and Diffuser

ELG – The additional UF Skid will be installed and commissioned. OKEP will complete the ELG and maintenance tank punchlist items. Engineering of the reliable power supply will continue.

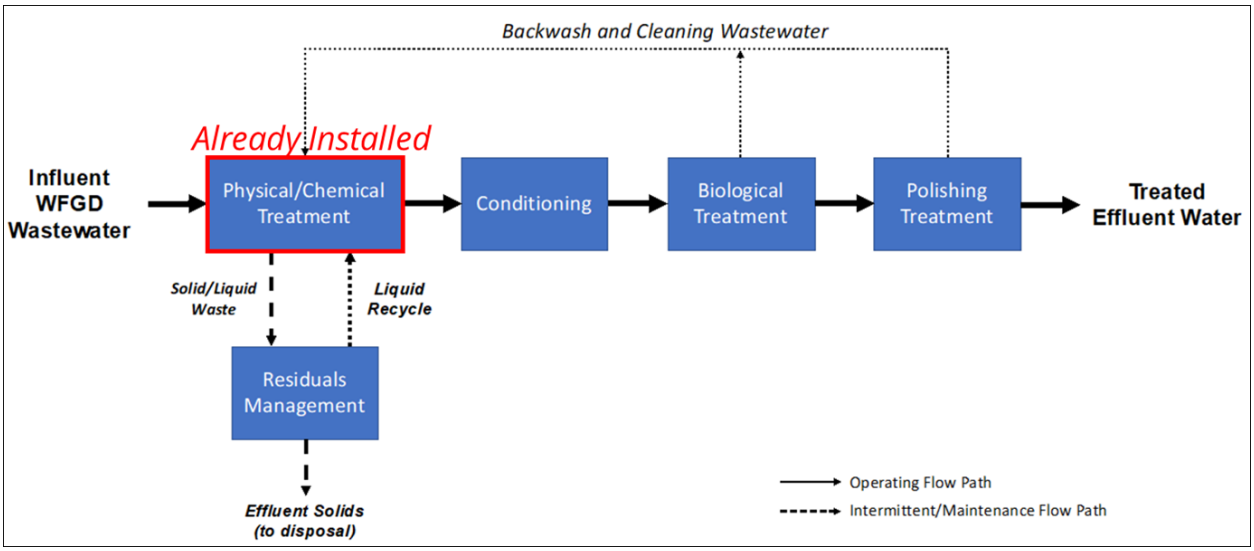
BATW – The BATW was placed into service in 2024. Engineering of the additional BATW surge capacity will continue.

APPENDIX

ELG Water Treatment System Description – TC, MC, and GH

The ELG Rule requires the Companies to use the Best Available Technology Economically Achievable ("BAT")[9] to control particulate, metals, arsenic, mercury, selenium, and nitrates/nitrites. Current BAT technology is physical/chemical treatment plus biological treatment. The process water systems are physical/chemical systems designed to capture particulate and most metals; however, they are not designed to capture nitrates/nitrites and selenium. The levels of nitrate/nitrite and selenium capture required by the ELG Rule requires biological treatment of the process water treatment system's effluent.

The first step in the biological treatment process is denitrification, which is the reduction in concentration of nitrates/nitrites through a biological process utilizing denitrification equipment. Effluent from the denitrification equipment is discharged to the first stage reactor, which is comprised of fiberglass vessels and internal reactor surfaces. The reactor contains living microorganisms, which are fed nutrients and convert the nitrates/nitrites and selenium molecules in an aerobic atmosphere, to an elemental form. Effluent from the first stage reactor flows into a second stage reactor, where additional biological processes reduce remaining selenium. The elemental form of selenium is transferred, via a backwash phase of the process, to the equalization tanks at the beginning of the process water treatment system for particulate removal. The second stage reactor feeds to an ultrafiltration ("UF") system where remaining particulate metals are filtered out. The UF tank is then discharged to a series of clean water tanks, which can be used to backwash the biological and UF systems or be discharged. A "typical" flow diagram is shown below.



The majority of the mechanical and electrical systems will be constructed in a building for weather protection, whereas most of the biological process tanks will be located outside. The building houses the denitrification equipment, UF systems, effluent tanks, various pumps and support subsystems. The system also requires cleaning and chemical feed equipment, pumps, piping, valves, and electrical equipment.

[9] 84 Fed. Reg. 64624.

Separate rooms must be constructed inside the treatment building to house battery systems and electrical equipment. A control room is also required, along with restrooms. The reactor area, including the vessels housing the microorganisms, will be constructed outside the building under a weather canopy. All of the tanks and reactors in the system must be large enough to handle the immense volume of water flowing through the effluent treatment process. In other words, the system must be sized commensurate with the process water treatment systems recently commissioned to enable treatment of the effluent of flow from the process water treatment systems.

Diffusers Description – GH and MC

The diffusers installed at GH and MC are large multi-port pipes that connect to the stations' wastewater outfall pipe and are placed into the bottom of the Ohio River with the discharge ports above the riverbed and facing downstream. The pictures shown below provide a general concept of the GH diffuser, similar to the MC diffuser. As this graphic representatively shows, the diffuser is a single large discharge pipe that is installed in the riverbed. The diffuser ports face downstream to disperse the water out of multiple discharge ports instead of a single, larger point of discharge.

Ghent Outfall 001 Diffuser Concept

