

**2016 ECR Plan Status Update Report
Quarterly Report – Update #22
January 31, 2022**

Executive Summary:

General

This report covers LG&E and KU’s (“Companies”) progress on the 2016 Environmental Cost Recovery (“ECR”) Plan through the fourth quarter of 2021.

The overall 2016 ECR Plan safety performance through the fourth quarter of 2021 remains excellent with a year-to-date OSHA Recordable Incident Rate of 1.05 and an inception-to-date OSHA Recordable Incident Rate of 0.48, compared to the industry average of 3.2.

As reported in the last quarter, the total 2016 ECR Plan projected cost remains \$979.0 million (net)¹, compared to the filed total of \$996.4 million as provided in Case Nos. 2016-00026, 2016-00027, and 2017-00483. Total spend to date increased from \$860.7 million (net) last quarter to \$882.4 million (net) through December 31, 2021.

CCR Compliance (CCR Rule and State CCR Pond Closures)

Safety performance through the fourth quarter is excellent with a year-to-date OSHA Recordable Incident Rate of 1.05 and an inception-to-date Recordable Incident Rate of 0.49, compared to an industry average Recordable Incident Rate of 3.2.

The total projected cost for the Coal Combustion Residual (“CCR”) Closure Program remains \$948.8 million (net). Total spend to date through December 31, 2021 increased from \$830.5 million (net) last quarter to \$852.2 million (net).

The remaining engineering activities primarily consist of corrections for “as-built” field changes during construction on the projects completed or under construction. Remaining procurement activities are associated with contract maintenance of all awarded contracts through completion of the work and warranty periods.

In compliance with the U.S. Environmental Protection Agency’s (“EPA”) final closure deadline of April 11, 2021, the Companies have initiated closure of all unlined CCR surface impoundments. While the large scale of the various closure processes will take time to complete, all of LG&E and KU’s former CCR surface impoundments have ceased receiving CCRs for disposal and other process streams have been successfully re-routed, diverted, or otherwise modified so that the closed units no longer receive any other

¹ 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.

materials. By persistently pursuing the closure processes, the Companies have completed the physical closure for 11 CCR impoundments. The Companies continue to progress towards completion of the three remaining closures that have already been initiated.

On January 11, 2022, EPA issued a press release and preliminary decision documents for 9 of the 57 Part A applications it received. These documents are relevant because they describe EPA's revised interpretations of some portions of the CCR Rule. Part A applications allow utilities to request an extension on the date of closure for CCR impoundments. The Companies did not submit any Part A applications, as they are on track with closing the CCR impoundments by the required closure dates.

The Agency appeared to signal its plans to aggressively regulate CCR Rule issues by granting only one "conditional" approval of the nine Part A applications it released. All others were deemed ineligible, incomplete, or were denied. All applications, even the one receiving "conditional" approval, were found by EPA to be deficient. EPA indicated the applications lacked the necessary information that EPA expected to receive.

EPA also interpreted the Rule in ways that conflict with previous guidance. As a particular example, Administrator Michael S. Regan stated that the Agency's "consistently held position" is that in-place closure will not be allowed for CCR Units that are in contact with groundwater. It had been understood that in-place closure or closure by removal were equivalent processes for CCR impoundments.

The Agency also issued a series of separate letters to inform select facilities of concerns about improper groundwater monitoring, insufficient remedial progress, and regulation of inactive surface impoundments. In these letters, EPA noted that CCR added to impoundments after the closure date, even if justifiable as beneficial use, was prohibited.

The Companies did not submit any Part A applications and the Companies did not receive any of the letters where EPA identified "concerns" with CCR Rule compliance. However, the information contained in these EPA documents has potential to impact CCR Rule compliance. For that reason, the Companies continue to track these developments and the effects they may have on future CCR-Rule related regulations.

The Companies have previously advised that single-party control of the executive and legislative branches of the Federal government could result in legislation and/or policies that are restrictive to fossil fuels and CCRs. EPA's recent statements and documents, as described above, suggest that the Agency is likely to take a more aggressive role in CCR Rule administration. The Companies will continue to actively monitor these types of developments.

CCR Impoundment Closures

- Ghent – Tetra Tech's ("TT") Phase II and III scope (construction of the South Cooling Pond, closure of Ash Treatment Basin ["ATB"] #1, and closure of ATB #2) is in closure as of January 9, 2020. The cap-in-place closure of ATB #1 and the clean closure of the South Gypsum Stack and Secondary Pond have been completed per CCR Rule requirements. TT is nearing completion of

the fabric formed concrete installation for construction of the South Cooling Pond. Work to date on ATB #2 is progressing to plan with regrading of the in-place CCR material: hauling of CCR material from the Gypsum Stack (completed in the fourth quarter of 2021) Coal Combustion Residual Treatment area, as well as filter cake from the Process Water System (“PWS”); and installation of the synthetic liner system over areas of ATB #2 that have achieved final grade. TT continues to progress the Ghent projects very well with no compliance issues forecasted.

- E.W. Brown – Thalle Construction (“Thalle”) impoundment closure activities are nearly complete. Thalle has completed the installation of the closure system on the impoundment; however, dewatering of the remaining interstitial water (below the liner cap system) through the use of deep wells is ongoing. Once complete, the wells will be decommissioned along with the chemical dewatering treatment system. The construction of a walking trail and the installation of pollinators and native grasses in the soil borrow area were completed during the fourth quarter of 2021. Some additional repairs to the walking trail and vegetation will be completed in the second quarter of 2022 when the weather is more favorable. An asphalt section of Curdsville Road/State Highway 342 was repaired during the fourth quarter of 2021 as a result of damage related to the hauling of cover soil from the Carey Farm property to E.W. Brown.
- Green River – Project completed in the second quarter of 2020. Working on project warranty items to address minor issues identified after the CCR facilities were capped in place.
- Mill Creek – TT completed submission of as-built survey data and remaining project close-out documents. Final as-built drawings and the construction progress report will be completed by AECOM Technical Services, Inc. (“AECOM”) during the first quarter of 2022.
- Pineville – Project completed in the second quarter of 2020. Drainage issues identified after the completion of the project were addressed and completed during the fourth quarter of 2021 as warranty work.
- Trimble County – TT continues hauling CCR material to the Bottom Ash Pond (“BAP”) for beneficial use; excavating and grading activities within the BAP; began dredging work within the BAP; and received and stored the geomembrane, geosynthetic fabric, and geosynthetic clay liner (“GCL”) materials for the project.
- Tyrone – Project completed in the second quarter of 2020.

The CCR Impoundment Closure Program is on schedule to be completed on or before the CCR Rule regulatory deadlines.² To ensure the Companies’ CCR Compliance projects comply with the regulations and to share best practices and lessons learned, the Companies continue to hold program-wide meetings

² EPA has committed to revising various portions of the CCR Rule. While changes to the CCR Rule have been proposed, EPA has indicated that there are still other additional proposals under development. Many factors have substantially extended EPA’s anticipated timeline for revisions beyond their original schedule. However, the Companies’ strategies continue to be resilient and CCR Rule changes under consideration should not force any major re-evaluations of our plans. LG&E and KU remain well positioned to comply with the evolving CCR Rule. The Companies will continue to closely monitor revisions to the CCR Rule and to ongoing litigation and will continue to update the Commission as it relates to issues that may affect construction schedules and activities.

with internal project management teams and affected stations to provide opportunities for all parties to deliver updates and to ensure the contractors are providing similar deliverables across the projects.

Process Water System Projects

- Trimble County – Project has been placed into Commercial Operation.
- Mill Creek – Project has been placed into Commercial Operation.
- Ghent – Project has been placed into Commercial Operation.
- E.W. Brown – Project has been placed into Commercial Operation.

Schedules

CCR Rule and State CCR Impoundment Closures

Project	Project #	EPC Status³	Planned / Actual In-Service Date⁴
E.W. Brown Aux Pond	KU Project 42	Awarded July 9, 2018	April 2022
E.W. Brown Main Ash Pond (Deleted Phase III of Landfill)	KU Project 36	Completed	Closure Completed 4Q 2020
Ghent ATB #1	KU Project 40	Awarded September 7, 2018	Cap and Closure Completed 4Q 2021
Ghent ATB #2	KU Project 40	Awarded May 22, 2020	December 2024
Ghent Gypsum Stack	KU Project 40	Amended Sept. 7, 2018	Clean Closure Completed 3Q 2021
Green River Main Pond	KU Project 39	Completed	Cap and Closure Completed 2Q 2019
Green River ATB #2	KU Project 39	Completed	Cap and Closure Completed 3Q 2019
Green River SO2 Pond	KU Project 39	Completed	Clean Closure Completed 2Q 2019
Mill Creek Ash Pond	LG&E Project 29	Awarded April 4, 2019	Cap and Closure Completed 3Q 2021
Mill Creek Clearwell Pond	LG&E Project 29	Completed	Clean Closure Completed & New Pond in Service 4Q 2018
Mill Creek Construction Runoff Pond	LG&E Project 29	Completed	Clean Closure Completed 2Q 2018 and New Pond in Service 3Q 2018
Mill Creek Emergency Pond	LG&E Project 29	Completed	Clean Closure Completed and area structurally backfilled in 2017
Mill Creek Dead Storage Pond	LG&E Project 29	Completed	Clean Closure Completed and area structurally backfilled 3Q 2019
Pineville Ash Pond	KU Project 39	Completed	Cap and Closure Completed 3Q 2019
Trimble County Bottom Ash Pond	KU Project 41, LG&E Project 30	Awarded August 13, 2021	October 2024
Trimble County Gypsum Storage Pond	KU Project 41, LG&E Project 30	Awarded August 13, 2021	October 2023
Tyrone Ash Pond	KU Project 39	Completed	Cap and Closure Completed 3Q 2019

³ Engineering, Procurement, and Construction (“EPC”) Status – the red font signifies actuals.

⁴ The Planned In-Service Dates reflect the executed EPCs – the red font signifies actuals. Ghent ATB #2 and Trimble County BAP was changed to 2024 to reflect a mid-point between the original rule and the proposed rule changes being litigated. Trimble County GSP completion date reflects completion of the work; however, the removal of CCR is planned to be completed in 2022.

PWS Projects

<u>Project</u>	<u>Project #</u>	<u>EPC Status</u> ³	<u>Planned/ Actual In-Service Date</u> ⁴
E.W. Brown PWS	KU Project 42	Completed	Placed in Service May 2020
Ghent PWS	KU Project 40	Completed	Placed in Service April 2020
Mill Creek PWS	LG&E Project 29	Completed	Placed in Service October 2019
Trimble County PWS	KU Project 41, LG&E Project 30	Completed	Placed in Service October 2019

E.W. Brown Landfill Phase II and Phase III

On October 12, 2021, KU received from the Kentucky Division of Waste Management (“KDWM”) a letter of acceptance of the Construction Progress Report (“CPR”) and issued the permit. Phase II has been placed into service.

On September 21, 2021, KU submitted the CPR for the Landfill Phase III Final Cover to the KDWM for their review. Notice of Deficiency (“NOD”) # 1 was received on October 19, 2021. KU responded on December 16, 2021. NOD # 2 was received on January 7, 2022. KU will be providing a response during the 1st quarter of 2022.

Quarterly Status Update:

Federal CCR Rule Closure Projects:

KU Project 40 – Ghent (GH) Station CCR Rule Compliance Construction and New PWS

KU continues to hold weekly and monthly project update meetings. Tetra Tech’s (“TT”) Phase II and III scope (construction of the South Cooling Pond, closure of Ash Treatment Basin [“ATB”] #1, and closure of ATB #2) is in closure as of January 9, 2020. The cap-in-place closure of ATB #1 and the clean closure of the South Gypsum Stack and Secondary Pond have been completed per CCR Rule requirements. TT is nearing completion of the fabric formed concrete installation for construction of the South Cooling Pond. Work to date on ATB #2 is progressing to plan with regrading of the in-place CCR material: hauling of CCR material from the Gypsum Stack (completed in the fourth quarter of 2021) Coal Combustion Residual Treatment area, as well as filter cake from the Process Water System (“PWS”); and installation of the synthetic liner system over areas of ATB #2 that have achieved final grade. TT continues to progress the Ghent projects very well with no compliance issues forecasted.

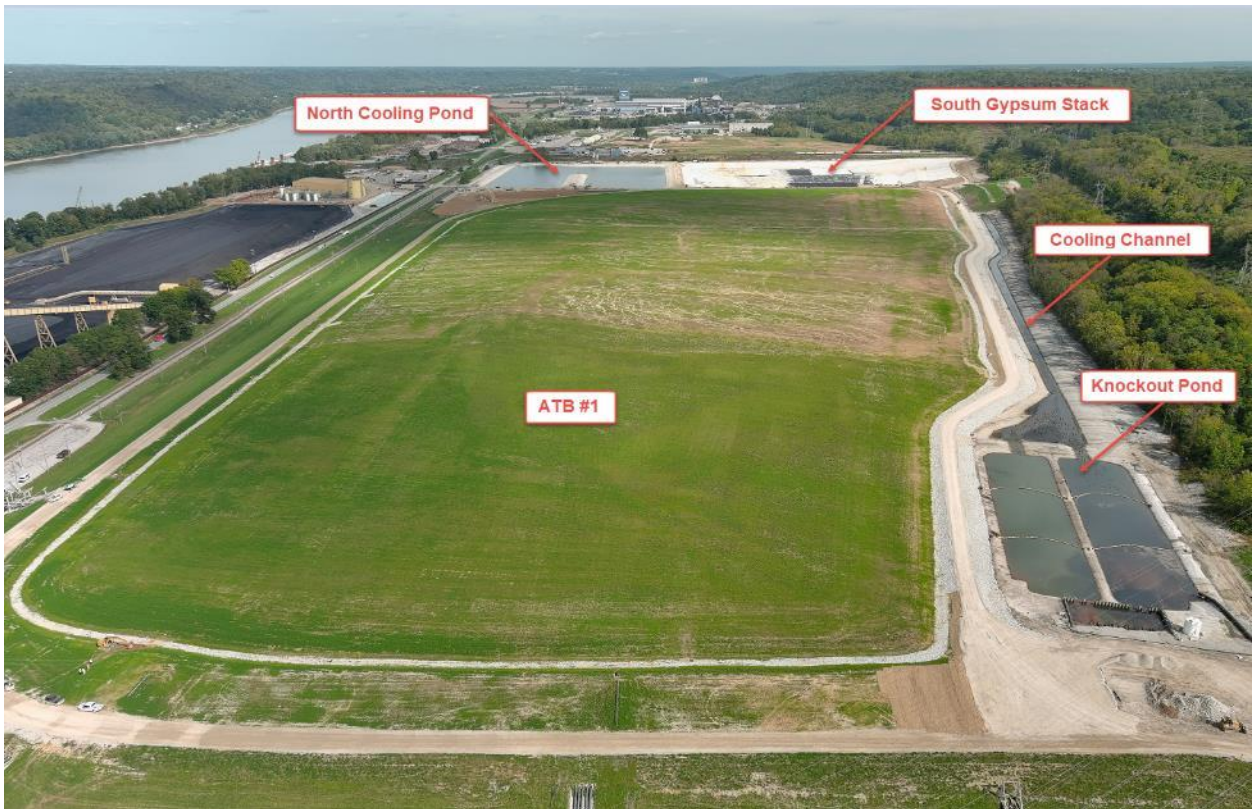
The PWS project has been completed and the EPC contractor was granted Final Completion. Working on project close-out activities to address minor issues identified during execution of the PWS project.



Ghent ATB #1 – Looking West – October 2021



Ghent ATB #1 – Looking West – January 2022



Gwent ATB #1 and Cooling Channel – Looking East – October 2021



Gwent ATB #1 and Cooling Channel – Looking East – January 2022

KU Project 41 and LG&E Project 30⁵ – Trimble County (TC) Station CCR Rule Compliance Construction and New PWS

KU continues to hold weekly and monthly project update meetings. TT continues hauling CCR material to the BAP for beneficial use; excavating and grading activities within the BAP; initiated dredging work within the BAP; and received and stored the geomembrane, geosynthetic fabric, and geosynthetic clay liner (“GCL”) materials for the project.

Traylor Industrial was awarded a contract to modify the existing Gypsum Storage Pond (“GSP”) pump raft to facilitate dewatering of the GSP in accordance with the Kentucky Division of Water (“KDOW”) agreed order. The work was completed in the fourth quarter of 2021.

⁵ KU and LG&E’s net costs are split 48% and 52%, respectively.



Trimble BAP – Looking North – October 2021



Trimble BAP – Looking North – January 2022

KU Project 42 – E.W. Brown (BR) Station CCR Rule Compliance Construction and New PWS

E.W. Brown – Thalle Construction (“Thalle”) impoundment closure activities are nearly complete. Thalle has completed the installation of the closure system on the impoundment; however, dewatering of the remaining interstitial water (below the liner cap system) through the use of deep wells is ongoing. Once complete, the wells will be decommissioned along with the chemical dewatering treatment system. The construction of a walking trail and the installation of pollinators and native grasses in the soil borrow area was completed during the fourth quarter of 2021. Some additional repairs to the walking trail and vegetation will be completed in the second quarter of 2022 when the weather is more favorable. An asphalt section of Curdsville Road/State Highway 342 was repaired during the fourth quarter of 2021 as a result of damage related to the hauling of cover soil from the Carey Farm property to E.W. Brown.



E.W. Brown Aux Pond – October 2021



E.W. Brown Aux Pond – January 2022



E.W. Brown Landfill Phase II and Closure – October 2021



E.W. Brown Landfill Phase II and Closure – January 2022

LG&E Project 29 – Mill Creek (MC) Station CCR Rule Compliance Construction and New PWS

- TT completed submission of as-built survey data and remaining project close-out document. Final as-built drawings and the construction progress report will be completed by AECOM during the first quarter of 2022.



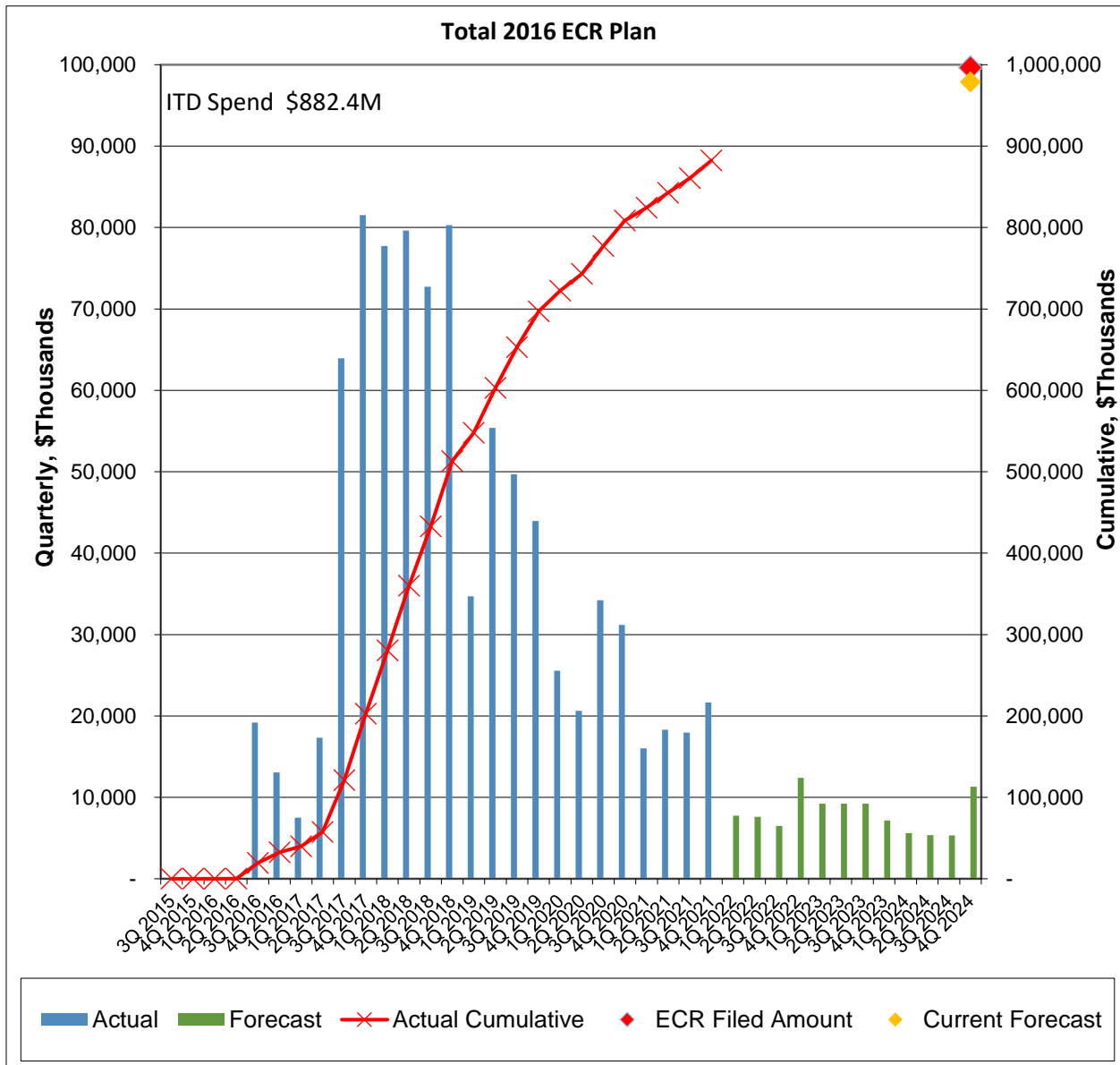
Mill Creek Main Ash Pond Closure – October 2021



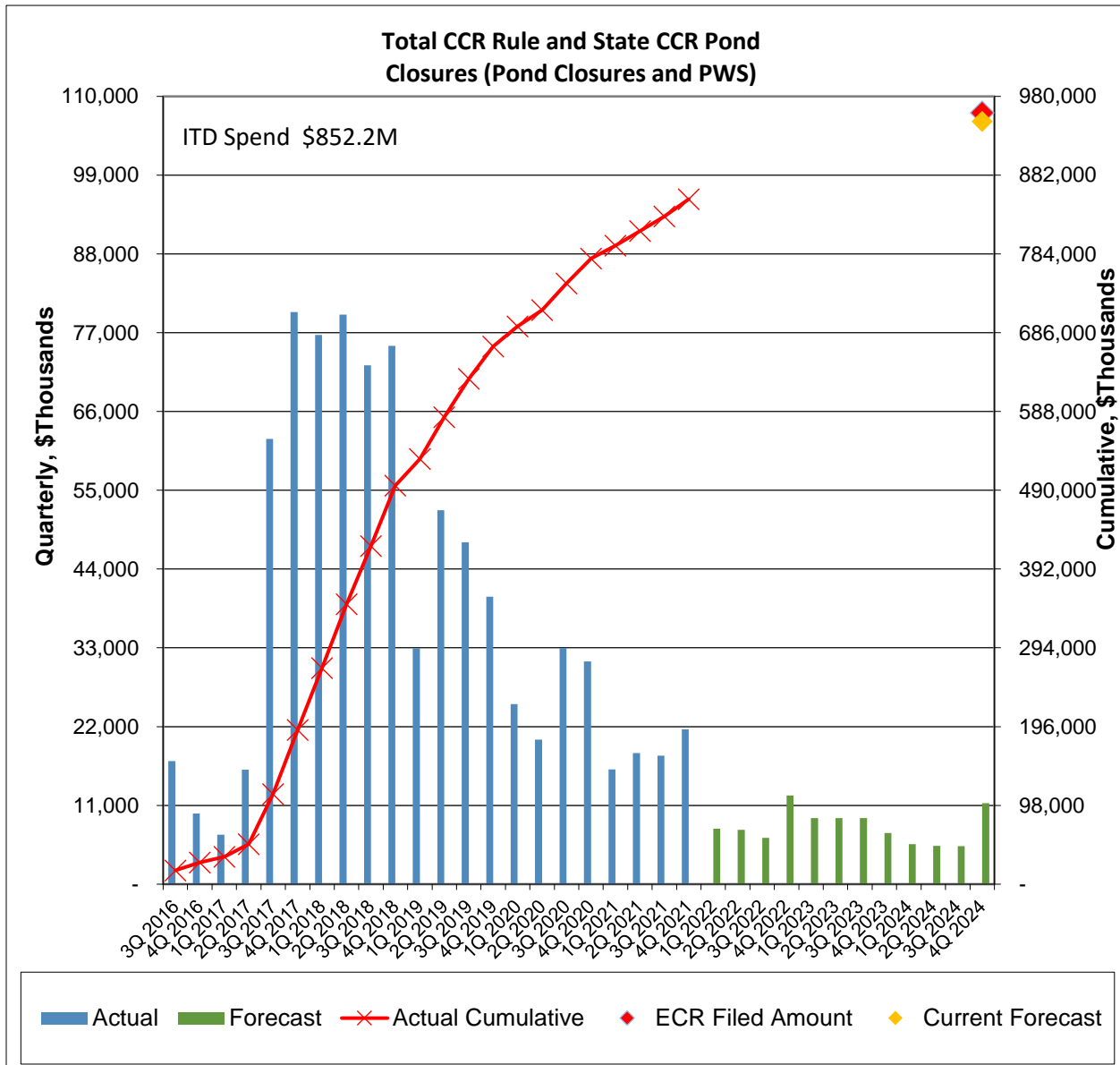
Mill Creek Main Ash Pond Closure – January 2022

Financials:

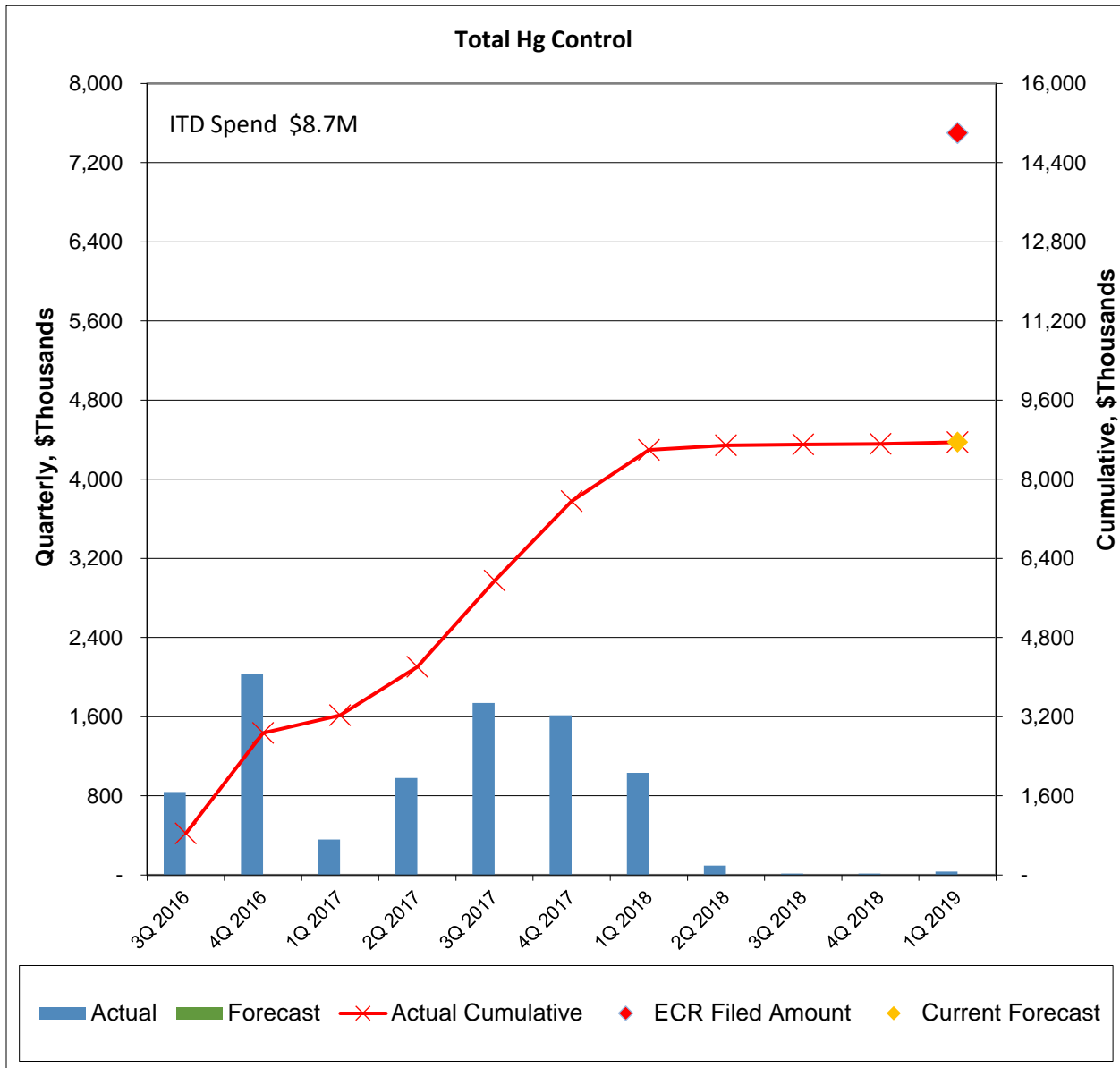
As reported in the last quarter, the total 2016 ECR Plan projected cost remains \$979.0 million (net), compared to the filed total of \$996.4 million. Total spend through December 31, 2021 has increased from \$860.7 million (net) last quarter to \$882.4 million (net). The graph below includes 1) a symbol (◆) to show the current forecast to completion and (2) inception-to-date (“ITD”) Spend in the upper left of the chart.



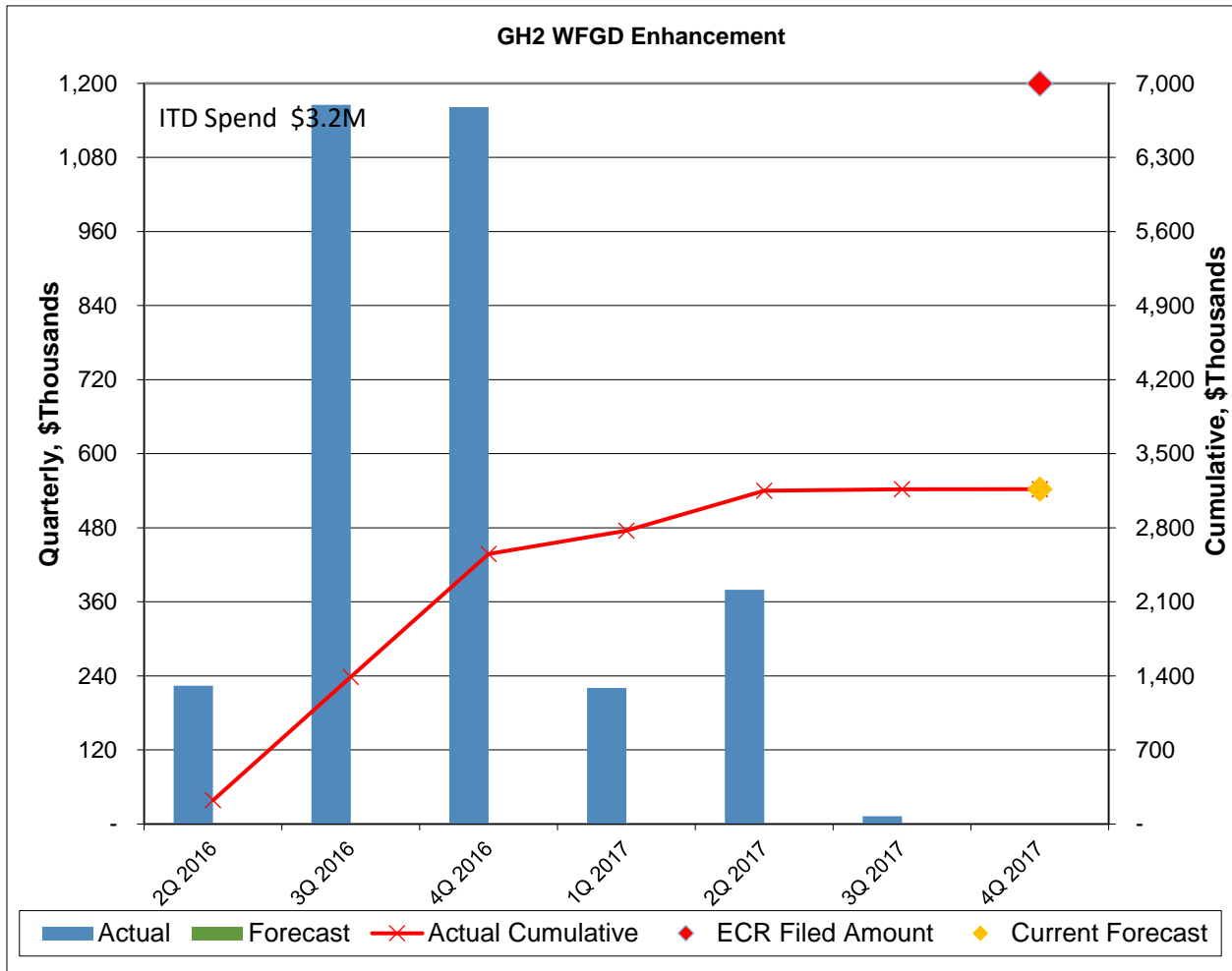
The CCR Impoundment Closure total forecasted cost remains \$948.8 million (net). Total spend through December 31, 2021 has increased from \$830.5 million (net) last quarter to \$852.2 million (net). The graph below includes 1) a symbol (◆) to show the current forecast to completion and (2) ITD Spend in the upper left of the chart.



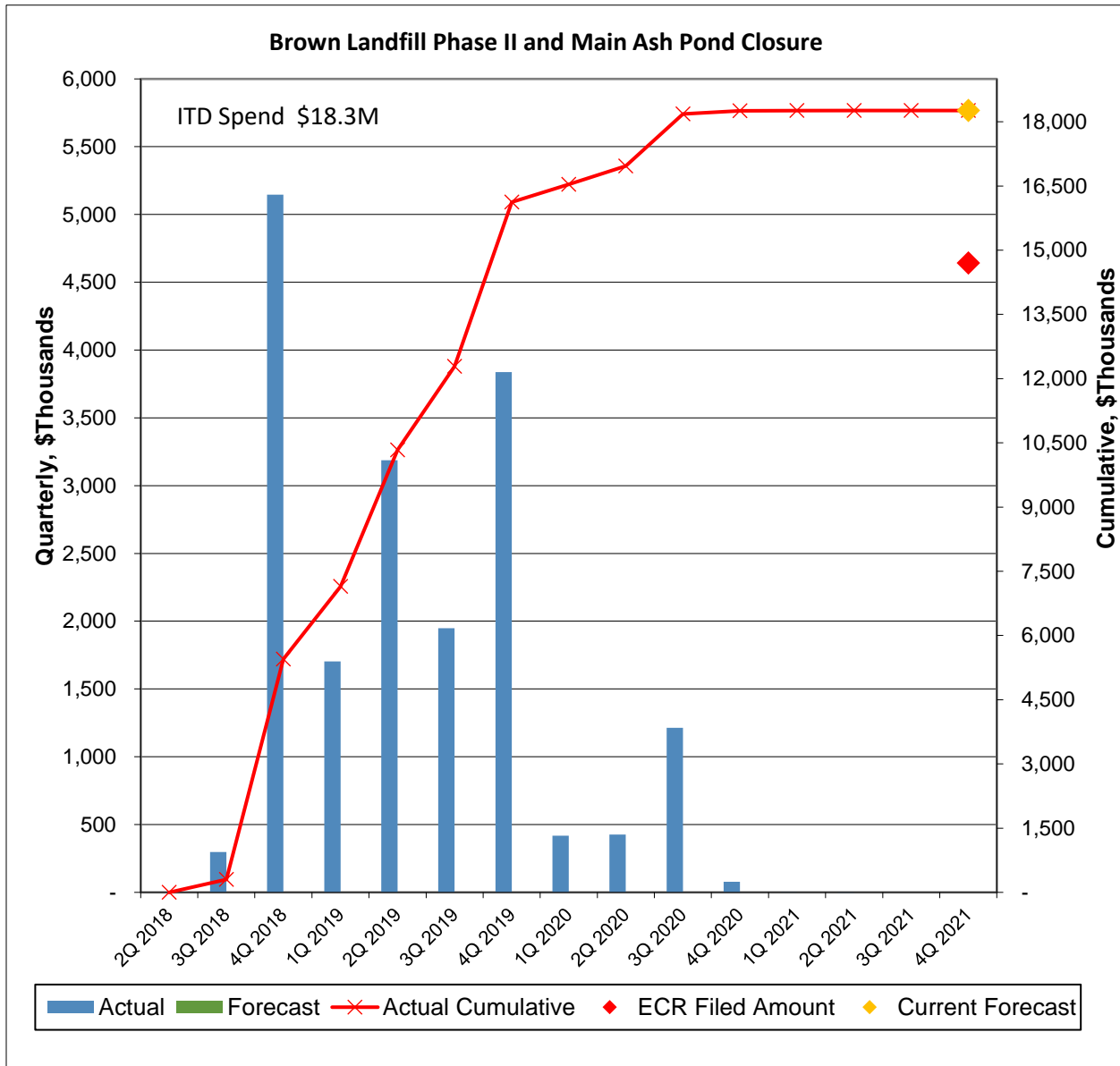
The Mercury Injection projects have been completed and commissioned. The project’s total spend was \$8.7 million compared to the filed estimate of \$15.0 million.



The Ghent Unit 2 WFGD Enhancement project has been completed. Total spend on the project was \$3.2 million compared to the filed estimate of \$7.0 million.



The E.W. Brown Landfill Phase II and Phase III Closure project forecasted costs remain at \$18.3 million. Total spend through December 31, 2021 remains \$18.3 million. The graph below includes 1) a symbol (◆) to show the current forecast to completion and 2) ITD Spend in the upper left of the chart.



Planned Activities for Next Quarter:

Federal CCR Rule Closure Projects

CCR Closures:

TT will continue with Phase III closure activities at Ghent, as well as closure activities on the Trimble County Bottom Ash Pond and Gypsum Storage Pond. Construction by Thalle will focus on dewatering for the E.W. Brown Auxiliary Ash Pond closure. The Companies will continue to monitor and work through warranty maintenance issues of the projects should they arise.

PWS Projects:

AMEC will continue working on warranty items on both the Mill Creek and Trimble County PWS projects. B&McD will continue to work on warranty items at Ghent. Both AMEC and B&McD, along with the Companies and the Companies' OE, will continue reviewing warranty matters along with remaining final engineering designs, procurement activities, and the operation of Suez's PWS equipment and process at all three stations (Ghent, Mill Creek, and Trimble County).

E.W. Brown Landfill Phase III Closure

The landfill Phase III CPR was completed and submitted by KU to the KDWM on September 21, 2021 for their review. All work is completed.