

**2016 ECR Plan Status Update Report
Quarterly Report – Update #18
January 29, 2021**

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 2020.

The overall 2016 ECR Plan safety performance through the fourth quarter of 2020 remains excellent with a year-to-date OSHA Recordable Incident Rate of 0.0 and an inception-to-date OSHA Recordable Incident Rate of 0.49, compared to the industry average of 3.2.

The total 2016 ECR Plan projected costs remain unchanged from last quarter's \$949.6 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 has increased from \$777.2 million (net) last quarter to \$808.4 million (net) through December 31, 2020.

The Companies continue to monitor the COVID-19 pandemic situation as well as work with all contractors to minimize the impact to the projects. To date, there have been no impacts to the work.

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 0.0 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 costs for the Coal Combustion Residual ("CCR") Closure Program remain unchanged from the last quarter's \$919.5 million (net) forecast. Total spend to date through December 31, 2020 has increased from \$747.1 million (net) last quarter to \$778.3 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, and the finalization of the Request for Quotation ("RFQ") documents for the closure scopes for the Trimble County Bottom Ash Pond ("BAP") and Gypsum Storage Pond ("GSP").

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.

The EPA continues to modify the CCR Rule as it relates to extended closure schedules and alternative liner types, finalizing changes to the Rule under Part A (August 28, 2020) and Part B (December 14, 2020) revisions. The Part A revision has minor significance for the Companies as it extended the closure implementation date for the Companies' three remaining unlined CCR impoundments until April 11, 2021. (The Companies' 11 other CCR impoundments have ceased receiving all CCRs and other materials and have initiated the closure process). As the Parts A and B revisions relate to other alternatives, the Companies have evaluated the provisions in each and determined that they do not appear to provide benefit to our customers. The Companies remain on track to comply with all of the Rule's provisions and deadlines.

On October 14, 2020, EPA published notice of plans to expand the CCR Rule to cover "legacy" CCR impoundments. "Legacy" is the term used to describe those CCR impoundments which existed at former generating sites. The Companies have already completed closure of all legacy CCR units (Pineville, Tyrone, Green River, Cane Run) in a manner consistent with the provisions of the CCR Rule, so the impact of this portion of the developing regulatory process is not anticipated to have any impact on the Companies' overall CCR Rule strategies.

The Companies will continue to closely follow the ongoing evolutions of the CCR Rule and the changes in implementation strategies that may result from the new federal Administration.

CCR Impoundment Closures

- Ghent – Tetra Tech's ("TT") Phase II scope (construction of the South Cooling Pond and closure of Ash Treatment Basin ["ATB"] #1) is currently in closure as of January 9, 2020. Work includes, but is not limited to, installation of a geo-synthetic liner cap, and the soil cover. Hauling of CCR material and installation of the synthetic liner system for ATB #1 has been completed. TT is currently hauling and placing soil cover over top of the synthetic liner system. Excavation of gypsum and overburden from the South Gypsum Stack is ongoing to attain the subgrade elevations for construction of the South Cooling Pond. Overall, TT continues to progress the Ghent projects very well with no compliance issues forecasted. Work to date on ATB #2 is progressing to plan with the installation of dewatering wells, hauling of CCR material from the Gypsum Stack and Coal Combustion Residual Treatment area, as well as filter cake from the Process Water System ("PWS").
- E.W. Brown – Thalle Construction ("Thalle") has completed the installation of the synthetic liner and placement of the 18" of cover soil across the entire impoundment. Dewatering of the remaining interstitial water, that is required to be removed per the design, continues through the use of deep dewatering wells. Once complete, the wells will be decommissioned along with the chemical dewatering treatment system. Thalle completed the installation of stormwater discharge pipe at the northeast corner of the impoundment. This pipe, along with an identical pipe at the southwest corner, will allow for the discharge of stormwater off of the impoundment cap system. Thalle will begin to haul topsoil in the first quarter of 2021 from an offsite source. Topsoil will be placed over the cover soil layer and work may extend into the second quarter of 2021 depending on rainfall during this period. Additional stormwater controls will continue to be constructed in the first quarter of 2021 with the installation of fabric-formed stormwater ditches and channel lining stone.

Thalle completed removal of cover soils from the Carey Farm and has begun restoration efforts. The vacated residence and barn at the Carey Farm were demolished and debris sent to a landfill during the fourth quarter of 2020. In addition to the Carey Farm, reclamation work commenced with the demolition of the Dempsey Farm’s abandoned structures. Demolition work and restoration of the area will be completed in the first quarter of 2021. In the second quarter of 2021, construction of a walking trail and installation of pollinators and native grasses will occur at the Dempsey Farm borrow area. Lastly, improvements to the access roads to the new process water pond and toe drain collection system were installed during the fourth quarter of 2020 with remaining work to be completed in January 2021.

- Green River – Project completed in the second quarter of 2020.
- Mill Creek – TT continues to make significant progress in the Main Ash Pond closure. TT completed hauling CCR material and installation of the synthetic liner system within the Main Ash Pond. TT continues hauling and placing soil cover over top of the synthetic liner system. Dewatering activities are ongoing as well as installation of the geo-synthetic liner system and fabric-form concrete for the new process water pond. The emergency CCR pond, construction run-off pond, clear-well pond and dead-storage pond have all been completed.
- Pineville – Project completed in the second quarter of 2020.
- Trimble County – The Kentucky Division of Water (“KDOW”) responded in November 2020 to the Companies’ May 2020 draft Agreed Order. The Companies responded with comments back to KDOW in late November 2020. The Companies expect to receive the Agreed Order from KDOW in the first quarter of 2021. The request for quotation for the closure of the two CCR impoundments (Bottom Ash Pond and Gypsum Storage Pond) will be issued to the market soon after receiving the signed Agreed Order from the KDOW.
- 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 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.

² EPA has committed to revising various portions of the CCR Rule. While they have proposed many changes to the CCR Rule, EPA has indicated that there are still other additional proposals under development. The scope of these changes, the interest they have generated, and COVID-19 re-prioritization of government resources have substantially extended EPA’s anticipated timeline for revisions beyond their original “end-of-2019” window. However, the Companies’ strategies have so far been resilient and CCR Rule changes anticipated will 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 update the Commission relative to issues that may affect construction schedules and activities.

Process Water System Projects

- Trimble County – Project has been placed into Commercial Operation.
- Mill Creek – Project has been placed into Commercial Operation. Warranty work and modifications to the dry bottom ash transport piping on all four units began in September 2020 and are progressing to plan.
- Ghent – Project has been placed into Commercial Operation.
- E.W. Brown – Project has been placed into Commercial Operation. Bowen Engineering continues to work to complete and deliver the record set of drawings at which time they achieve final completion.

Schedules

CCR Rule and State CCR Impoundment Closures

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

PWS Projects

<u>Project</u>	<u>Project #</u>	<u>EPC Status</u> ³	<u>Planned In-Service Date</u> ⁴
E.W. Brown PWS	KU Project 42	Awarded June 14, 2018	Placed in Service May 2020
Ghent PWS	KU Project 40	Awarded August 1, 2017	Placed in Service April 2020
Mill Creek PWS	LG&E Project 29	Final Completion Granted 1Q 2020	Placed in Service October 2019
Trimble County PWS	KU Project 41, LG&E Project 30	Final Completion Granted 1Q 2020	Placed in Service October 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.

E.W. Brown Landfill Phase II

The landfill Phase II was completed and made available for service; however, CCR cannot be placed into the Phase II area until the Construction Progress Report (CPR) is submitted and approved by the Kentucky Division of Waste Management which is expected in the first quarter of 2021. Thalle completed all remaining punch-list items and record drawings during the fourth quarter of 2020.

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. TT's Phase II scope construction of the South Cooling Pond and closure of ATB #1 is currently in closure as of January 9, 2020. Work includes, but is not limited to, installation of a geo-synthetic liner cap, and the soil cover. Hauling of CCR material and installation of the synthetic liner system for ATB #1 has been completed. TT is currently hauling and placing soil cover over top of the synthetic liner system. Excavation of gypsum and overburden from the South Gypsum Stack is ongoing to attain the subgrade elevations for construction of the South Cooling Pond. Overall, TT continues to progress the Ghent projects very well with no compliance issues forecasted. The Phase III closure of ATB #2 was awarded to TT during the second quarter of 2020. Work to date on the Phase III scope has been limited to preliminary site investigations, purchase of geo-synthetic materials, regrading of CCR material within the footprint of ATB #2, installation of dewatering wells, and hauling of CCR material from the Gypsum Stack and Coal Combustion Residual Treatment area and filter cake from the Process Water System ("PWS").

With regards to the PWS, Final Completion was issued to Burns & McDonnell ("B&McD") on November 19, 2020.



Ghent Gypsum Stack – Looking West – October 2020



Ghent Gypsum Stack – Looking North – January 2021



Ghent ATB #1 and Cooling Channel – Looking East – July 2020



Ghent ATB #1 and Cooling Channel – Looking East – December 2020

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

The Companies submitted a draft Agreed Order on how best to dewater the Bottom Ash Pond (“BAP”) to the KDOW in May 2020 and received an initial response in November 2020. The Companies issued responses to KDOW’s draft in late November. The Companies are anticipating having a signed Agreed Order in the first quarter of 2021. On-site work has been limited to interviewing potential bidders for the clean closure of the GSP and the closure-in-place of the BAP. Project Engineering’s commercial group and project team have completed developing the majority of the project specifications and contract documents that will be issued for bid to the market upon receiving a response from KDOW on the draft Agreed Order. The PWS project has been completed and the EPC contractor was granted Final Completion.

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

- Thalle has completed the installation of the synthetic liner and placement of the 18” of cover soil across the entire impoundment. Dewatering of the remaining interstitial water that is required to be removed per the design continues through the use of deep dewatering wells. Once complete, the wells will be decommissioned along with the chemical dewatering treatment system. Thalle completed the installation of stormwater discharge pipe at the northeast corner of the impoundment. This pipe, along with an identical pipe at the southwest corner, will allow for the discharge of stormwater off of the impoundment cap system. Thalle will begin to haul topsoil in the first quarter of 2021 from an offsite source. Topsoil will be placed over the cover soil layer and work may extend into the second quarter of 2021 depending on rainfall during this period. Additional stormwater controls will continue to be constructed into the first quarter of 2021 with the installation of fabric-formed stormwater ditches and channel lining stone. Thalle completed removal of cover soils from the Carey Farm and has begun restoration efforts. The vacated residence and barn at the Carey Farm were demolished and debris sent to a landfill during the fourth quarter of 2020. In addition to the Carey Farm, reclamation work commenced with the demolition of the Dempsey Farm’s abandoned structures. Demolition work and restoration of the area will be completed in the first quarter of 2021. In the second quarter of 2021, construction of a walking trail and installation of pollinators and native grasses will occur at the Dempsey Farm borrow area. Lastly, improvements to the access roads to the new process water pond and toe drain collection system were installed during the fourth quarter of 2020 with remaining work to be completed in January 2021.

Bowen Engineering continues to work to complete and deliver the Record set of drawings at which time they will achieve final completion on the PWS project.

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



E.W. Brown Aux Pond – October 2020



E.W. Brown Aux Pond – December 2020



E.W. Brown Landfill Phase II and Closure – October 2020



E.W. Brown Landfill Phase II and Closure – December 2020

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

TT continues to make significant progress in the Main Ash Pond closure. TT completed hauling CCR material and installation of the synthetic liner system within the Main Ash Pond. TT continues hauling and placing soil cover over top of the synthetic liner system. Dewatering activities are ongoing as well as installation of the geo-synthetic liner system and fabric-form concrete for the new process water pond. The PWS project has been completed and the EPC contractor was granted Final Completion. Warranty work and modifications to the dry bottom ash transport piping on all four units began in September 2020 and are progressing very well with three of the four generating units being completed as planned.



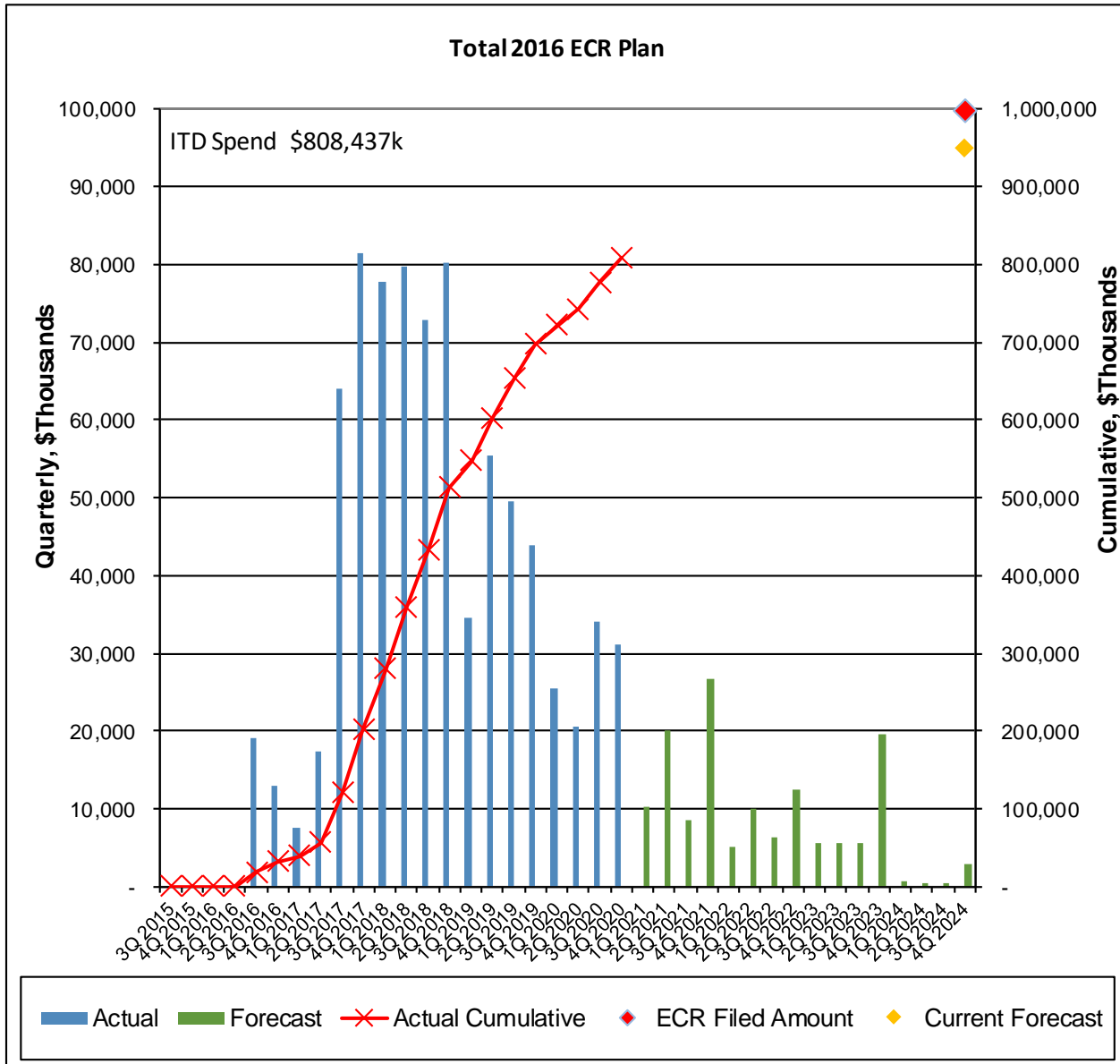
Mill Creek Main Ash Pond Closure – September 2020



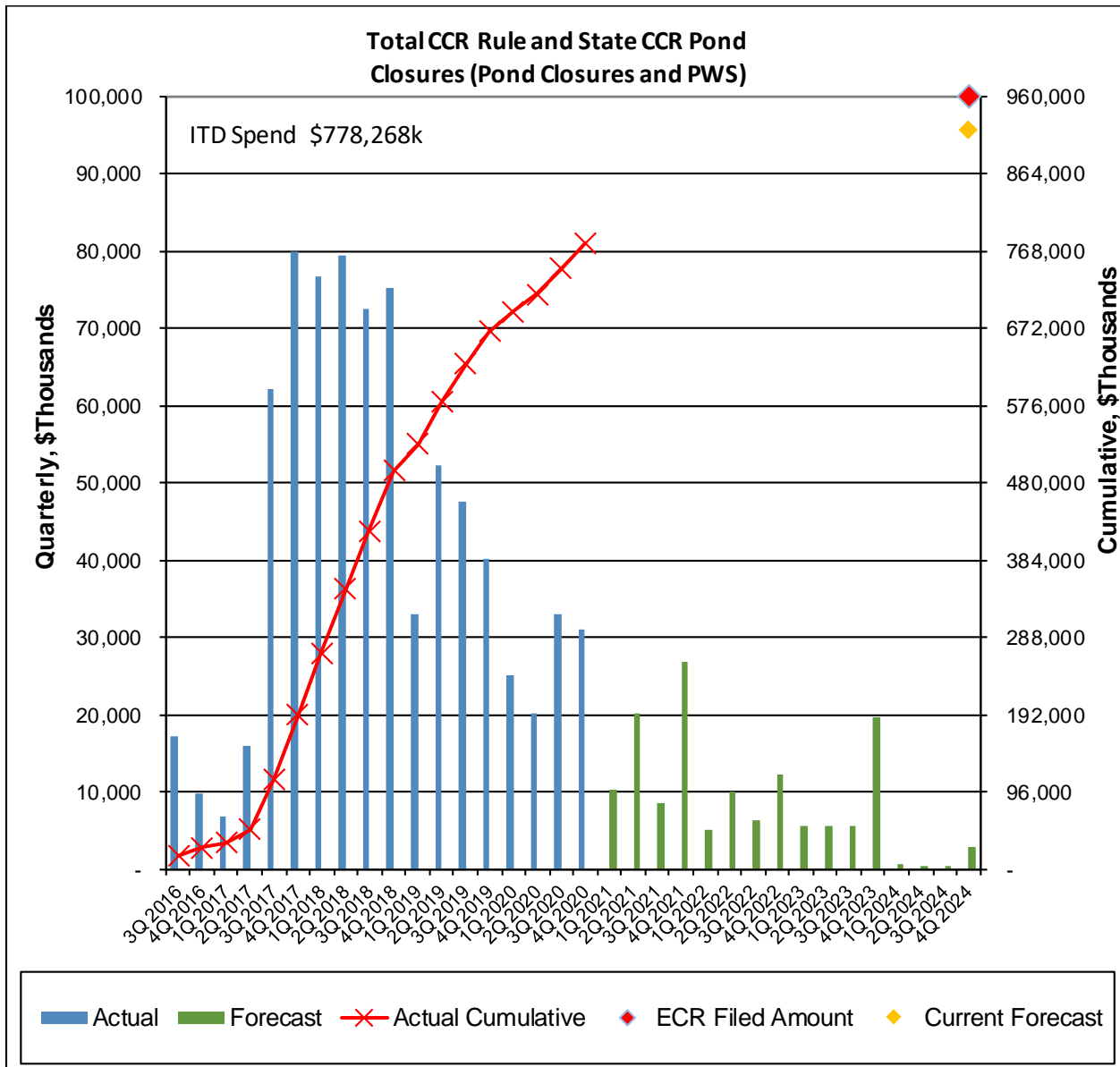
Mill Creek Main Ash Pond Closure – January 2021

Financials:

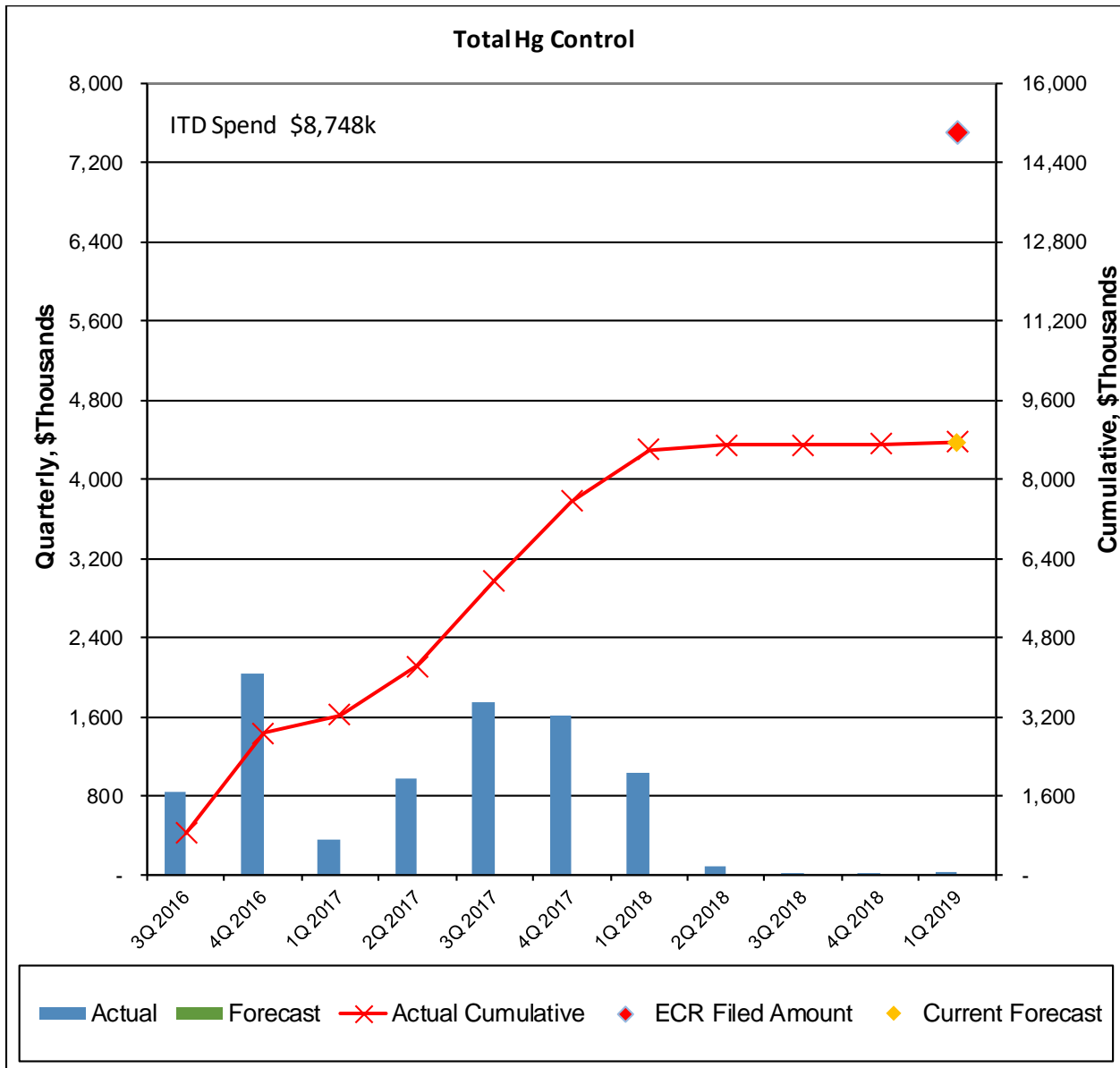
The total 2016 ECR Plan forecasted costs remain unchanged from the last quarter at \$949.6 million. Total spend through December 31, 2020 has increased from \$777.2 million (net) last quarter to \$808.4 million (net). The graph below includes 1) a symbol (◆) to show the current forecast to completion and (2) inception-to-date (“ITD”) Spend in the upper left of the chart.



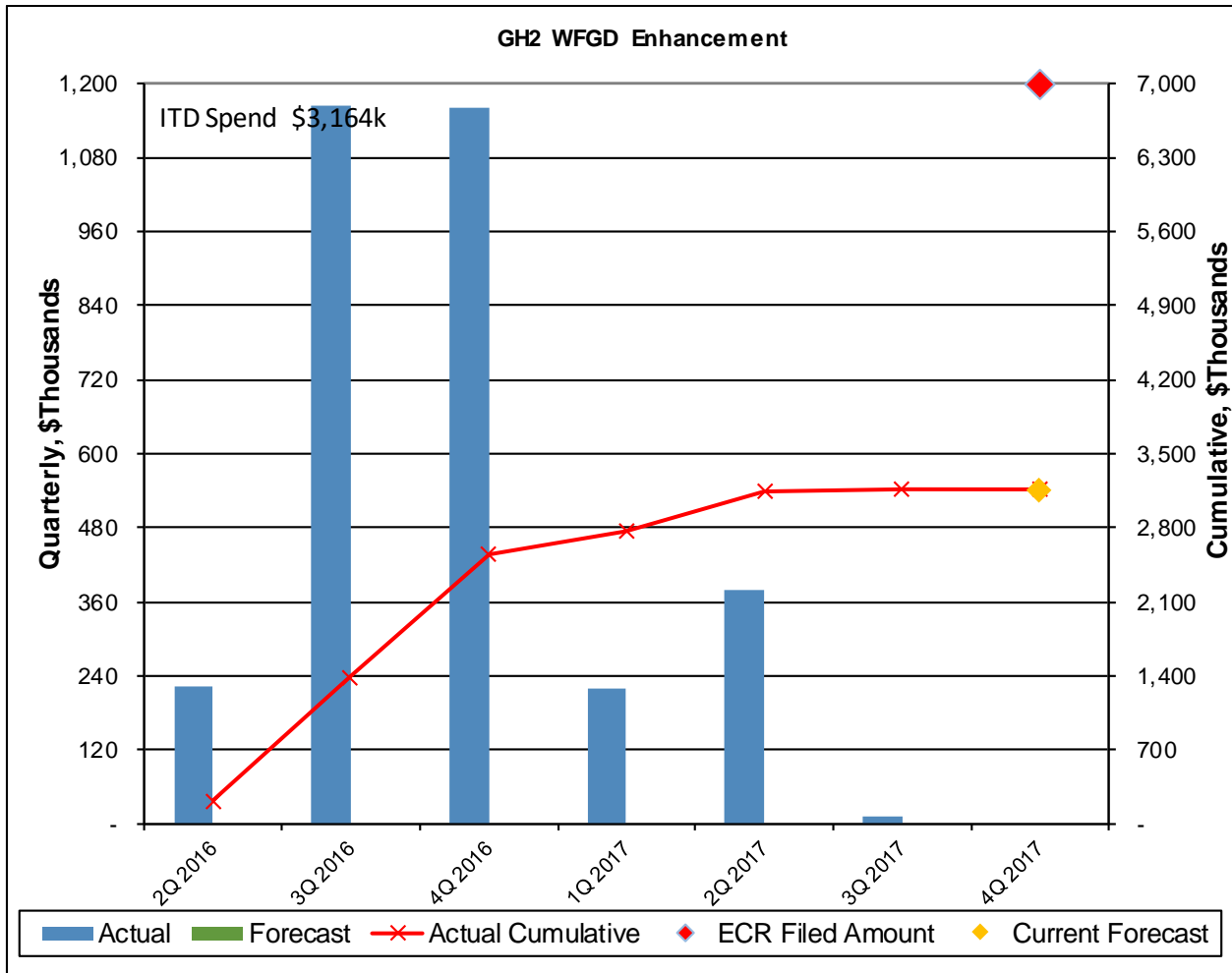
The CCR Impoundment Closure total forecasted costs remain flat from the last quarter at \$919.5 million (net) as explained above. Total spend through December 31, 2020 has increased from \$747.1 million (net) last quarter to \$778.3 million (net). The graph below includes 1) a symbol (◆) to show the current forecast to completion and (2) ITD Spend in the upper left of the chart.



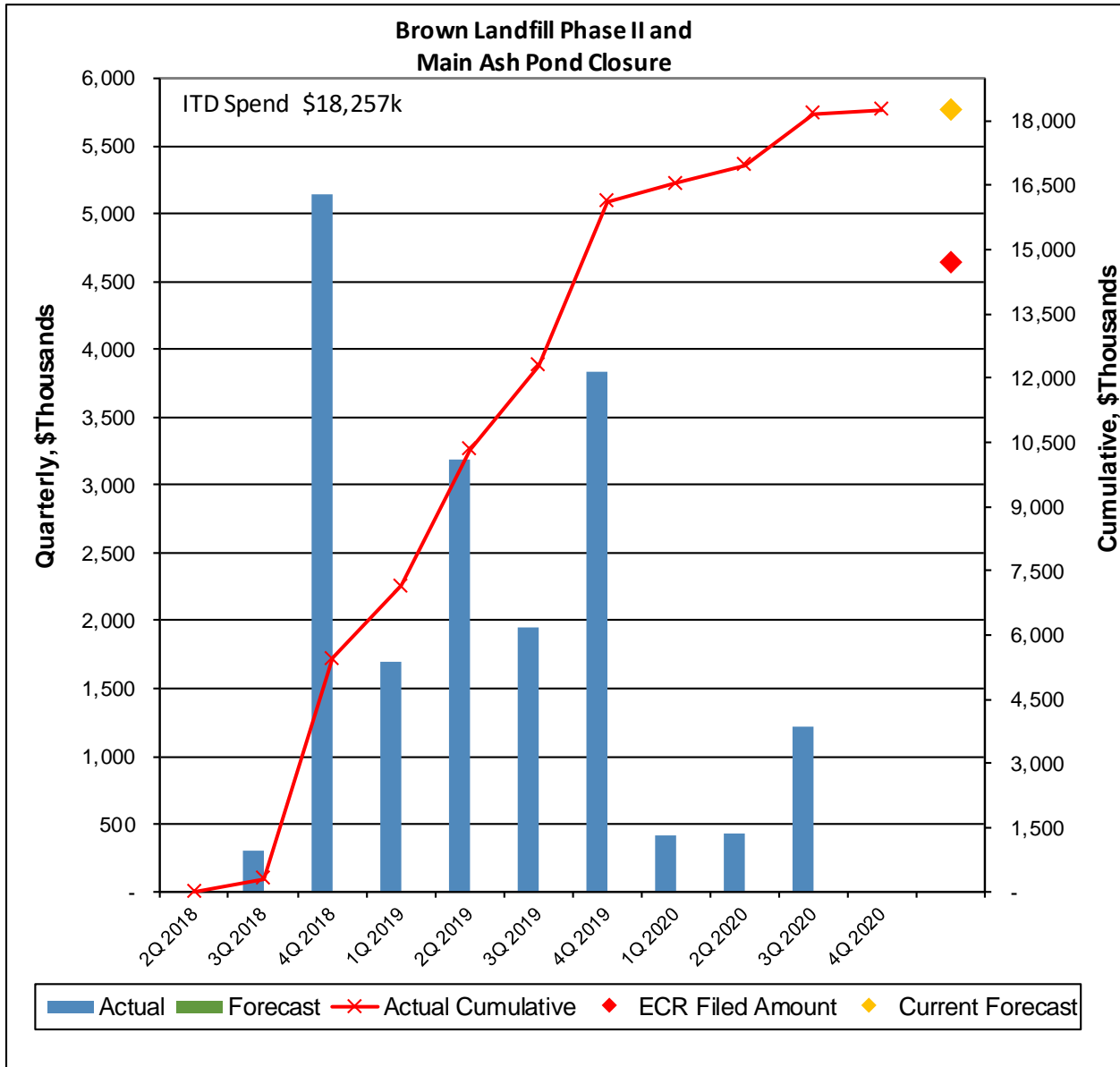
The Mercury Injection projects have been completed and commissioned. The project’s total spend was \$8.7 million compared to the filed estimate of \$15.0 million.



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, 2020 has increased from \$18.2 million last quarter to \$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:

State Division of Waste Closure Projects

Status updates were removed from this report going forward due to these projects being completed. There are no further construction plans for these projects except for warranty maintenance issues should they arise.

Federal CCR Rule Closure Projects

CCR Closures:

Tetra Tech will continue with Phase II & III closure activities at Ghent, as well as closure activities on the Mill Creek Main Ash Pond. Construction by Thalle will continue for the E.W. Brown Auxiliary Ash Pond closure scope focused on placement of cover soil on the closure liner system. Regarding Trimble County, the Companies expect to reach agreement with the KDOW on an Agreed Order on the dewatering of Trimble County's BAP. The Trimble County BAP and GSP closure projects RFQ will be ready for issuance to the market but will not be issued until the Companies reach agreement with KDOW on the Agreed Order to allow for incorporation of any impacts to the plan which is currently based on the draft Agreed Order the Companies sent to the KDOW.

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 punch list and warranty items. 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 II and Phase III Closure

Thalle will reach Substantial and Final Completion of the Landfill Phase II and the closure of Phase III.