

2016 ECR Plan Status Update Report Quarterly Report – Update #32 July 30, 2024

Executive Summary:

General

This report covers LG&E and KU's ("Companies") progress on the 2016 Environmental Cost Recovery ("ECR") Plan through the second quarter of 2024.

The overall 2016 ECR Plan safety performance through the second quarter of 2024 remains excellent with a Year-to-Date OSHA Recordable Incident Rate of 0.00 and an Inception-to-Date OSHA Recordable Incident Rate of 0.42, compared to the industry average of 2.4.

The total 2016 ECR Plan projected cost remained flat at \$1.0102 billion (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 to \$964.2 million (net) through June 30, 2024.

CCR Compliance (CCR Rule and State CCR Pond Closures)

Safety performance through the second quarter is excellent with a Year-to-Date OSHA Recordable Incident Rate of 0.00 and an Inception-to-Date Recordable Incident Rate of 0.46, compared to an industry average Recordable Incident Rate of 2.4.

The total projected cost for the Coal Combustion Residual ("CCR") Closure Program remained flat at \$980.0 million (net). Total spend to date through June 30, 2024 increased to \$934.0 million (net).

The remaining engineering activities primarily consist of supporting ongoing construction activities and updating design documents to reflect "as-built" conditions of the completed projects. Remaining activities are associated with awarded contracts through 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 takes years 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 solid or liquid materials. By persistently pursuing the closure processes, the Companies have completed the complex process of physical closure for 16 CCR Rule and State CCR Impoundment Closures. The Companies continue to progress towards completing closure of the three remaining CCR impoundments.

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.

As previously described, EPA has taken a series of aggressive positions relating to interpretation of the CCR Rule since January 2022. Statements in press releases, the general rejection of numerous Part A applications submitted by various companies, and inactivity and denial of delegation of CCR authority to individual states that have sought it have signaled the Agency's intent to re-position itself as it relates to key provisions of the Rule. Changes in EPA interpretations may force industry to re-evaluate strategies for implementing and/or completing impoundment closures. Given that many CCR facility owner/operators have initiated, implemented, and completed strategies for CCR Rule compliance, legal challenges to the Agency's potential expansion in scope of the CCR program have been introduced and are ongoing.

Recent EPA CCR Rule Initiatives

On May 8, 2024, EPA issued the Legacy CCR Surface Impoundment Rule. The Rule significantly expands the scope of CCR regulatory authority, beyond the 2015 Rule CCR regulatory confines, to include legacy impoundments at former generating stations and power plant sites where CCR was placed in direct contact with soil. These new units and facilities are subject to CCR regulation without regard to whether the activity was performed with state oversight or if the placement was executed as beneficial use. For the Companies, the regulation significantly increases the number of units to be managed under the federal CCR program. Additionally, the changes in the Rule will force the Companies to review closure decisions and examine locations and units that were not previously considered in the compliance strategies. Because of the uncertainties created by the Rule, the Companies expect that legal challenges to the Rule are probable and the respective outcomes may influence future compliance direction.

LG&E and KU CCR Rule Compliance Strategy and Updates

LG&E and KU will continue to closely track ongoing developments, as they have the potential to compel changes in the Companies' compliance strategy. To date, the EPA has made no determinations regarding any of the Companies' sites, closure activities, or compliance-related tasks, so LG&E and KU will continue to implement their current CCR Rule compliance strategies. Additional detail regarding individual locations and projects follows.

CCR Impoundment Closures

- Ghent – Tetra Tech's ("TT") Phase III scope (closure of ATB #2) is in closure as of January 9, 2020. The closure cap on ATB #2 has been completed. TT performed minor erosion repairs on the vegetative cover and continued to develop final as-built documentation. TT continues to progress the Ghent projects with no compliance issues forecasted.
- E.W. Brown – The Auxiliary Pond dewatering well system remains in place as well as associated surface piping. WSP (formerly Wood Environmental & Infrastructure Solutions, Inc.) continued to monitor the interstitial water elevations within the wells monthly. TT mobilized to E.W. Brown in late April and began the process of rehabilitating the existing dewater well system by pulling and reconditioning pumps, replacing electrical feeds, and removing and replacing all dewatering well discharge piping. TT reconditioned and tested wells individually to determine their ability to remove interstitial water and separated the dewatering well system into two networks. TT prepared the first network for a pilot test in July to determine the appropriate pump speeds for each well and

expected removal flow rate from this collection of wells. The second network of wells continues to be rehabilitated, following the first network by several weeks. WSP and GWTT (“Ground/Water Treatment and Technology, LLC”) continued to provide technical support and analysis of data collected in the field.

- Mill Creek – Project was completed in 2022. No further work is required.
- Trimble County – TT continues hauling CCR material to the Bottom Ash Pond (“BAP”) for beneficial use and managing stormwater runoff in the BAP. TT continues mass excavation of gypsum out of the Gypsum Storage Pond (“GSP”) and hauling it to the BAP to be used as beneficial use fill material. TT continued removing the existing liner system from the bottom of the GSP and undercutting as part of the closure by removal process. TT began installing geomembrane liner in northeast portion of the BAP and the eastern perimeter channel, constructing the southwest sampling (outfall) structure associated with the drainage pipe that will convey stormwater from the southwest portion of the BAP cap, and installing the 24-inch southwest drainage pipe and associated manholes.
- Tyrone – Project completed in the second quarter of 2020. No further work is required.

The CCR Impoundment Closure Program is on schedule to be completed on or before the CCR Rule regulatory deadlines in accordance with currently applicable requirements.²

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.

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 absent major regulatory developments, we do not expect that CCR Rule changes will require any major re-evaluations of our plans. 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.

Schedules

CCR Rule and State CCR Impoundment Closures

<u>Project</u>	<u>Project #</u>	<u>EPC Status³</u>	<u>Planned / Actual In-Service Date⁴</u>
E.W. Brown Aux Pond	KU Project 42	Completed	Closure Completed 4Q 2022 ⁵
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	Completed	Cap and Closure Completed 4Q 2021
Ghent ATB #2	KU Project 40	Awarded May 22, 2020	December 2024
Ghent Gypsum Stack	KU Project 40	Completed	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	Completed	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	December 2025
Trimble County Gypsum Storage Pond	KU Project 41, LG&E Project 30	Awarded August 13, 2021	December 2025
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 and 2025, respectively, 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 2023.

⁵ Project was placed into service during the 4Q 2022. Charges will continue to accrue into 2024 because of the ongoing negotiations with Thalle and completion of project close-out activities.

PWS Projects

<u>Project</u>	<u>Project #</u>	<u>EPC Status⁶</u>	<u>Actual In-Service Date⁴</u>
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

⁶ Engineering, Procurement, and Construction (“EPC”) Status – the red font signifies actuals.

E.W. Brown Landfill Phase II and Phase III

Work associated with this project has been completed; no further work is required.

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. Work to date on ATB #2 is progressing to plan. TT performed minor erosion repairs to the vegetative cover on the ATB #2 cap. TT completed restoration of the onsite borrow areas and continued site cleanup activities. TT continued to develop final as-built documentation. TT continues to progress the Ghent projects with no compliance issues forecasted.



Phase III Ghent ATB #2 – March 2024



Phase III Ghent ATB #2 – July 2024

KU Project 41 and LG&E Project 30⁷ – Trimble County (TC) Station CCR Rule Compliance Construction and New PWS

- LG&E and KU continue to hold weekly and monthly project update meetings. TT continues hauling CCR material to the Bottom Ash Pond (“BAP”) for beneficial use; grading activities within the BAP; removal of stormwater runoff from the BAP and GSP; construction of access roads and rim ditches in the GSP; mass excavation of gypsum within the GSP and transporting it to the BAP to be used as beneficial use fill material; and removing existing liner from the bottom of the GSP and undercutting as part of the closure by removal process. TT began installing geomembrane liner in northeast portion of the BAP and the eastern perimeter channel, constructing the southwest sampling (outfall) structure associated with the drainage pipe that will convey stormwater from the southwest portion of the BAP cap, and installing the 24-inch southwest drainage pipe and associated manholes.

⁷ KU and LG&E’s net costs are split 48% and 52%, respectively.



Trimble BAP – Looking Northeast – March 2024



Trimble BAP – Looking Northeast – July 2024



Trimble GSP – Looking South – March 2024



Trimble GSP – Looking South – July 2024

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

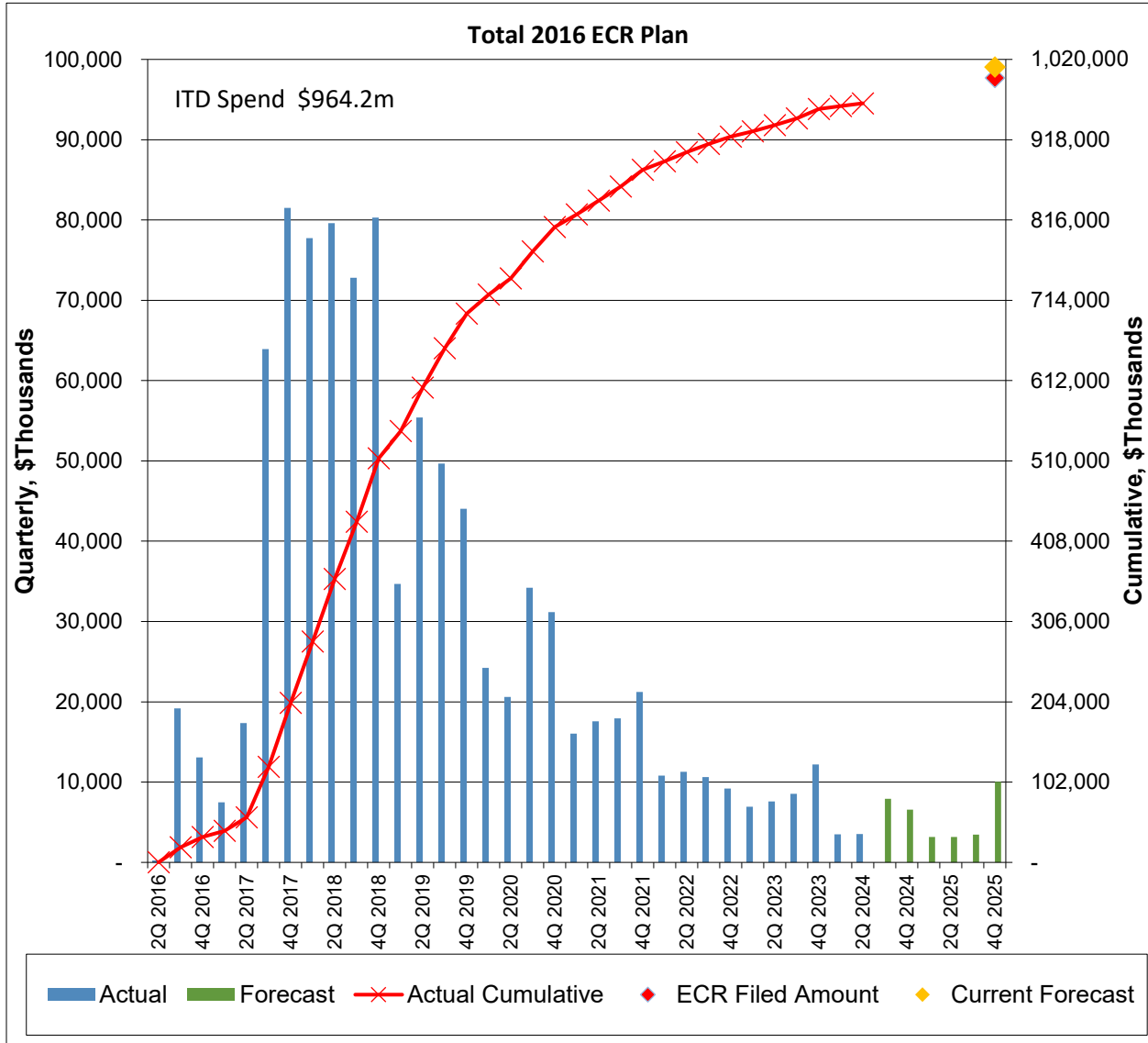
- E.W. Brown – The Auxiliary Pond dewatering well system remains in place as well as associated surface piping. WSP (formerly Wood Environmental & Infrastructure Solutions, Inc.) continued to monitor the interstitial water elevations within the wells monthly. TT mobilized to E.W. Brown in late April and began the process of rehabilitating the existing dewater well system by pulling and reconditioning pumps, replacing electrical feeds, and removing and replacing all dewatering well discharge piping. TT reconditioned and tested wells individually to determine their ability to remove interstitial water and separated the dewatering well system into two networks. TT prepared the first network for a pilot test in July to determine the appropriate pump speeds for each well and expected removal flow rate from this collection of wells. The second network of wells continues to be rehabilitated, following the first network by several weeks. WSP and GWTT continued to provide technical support and analysis of data collected in the field.

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

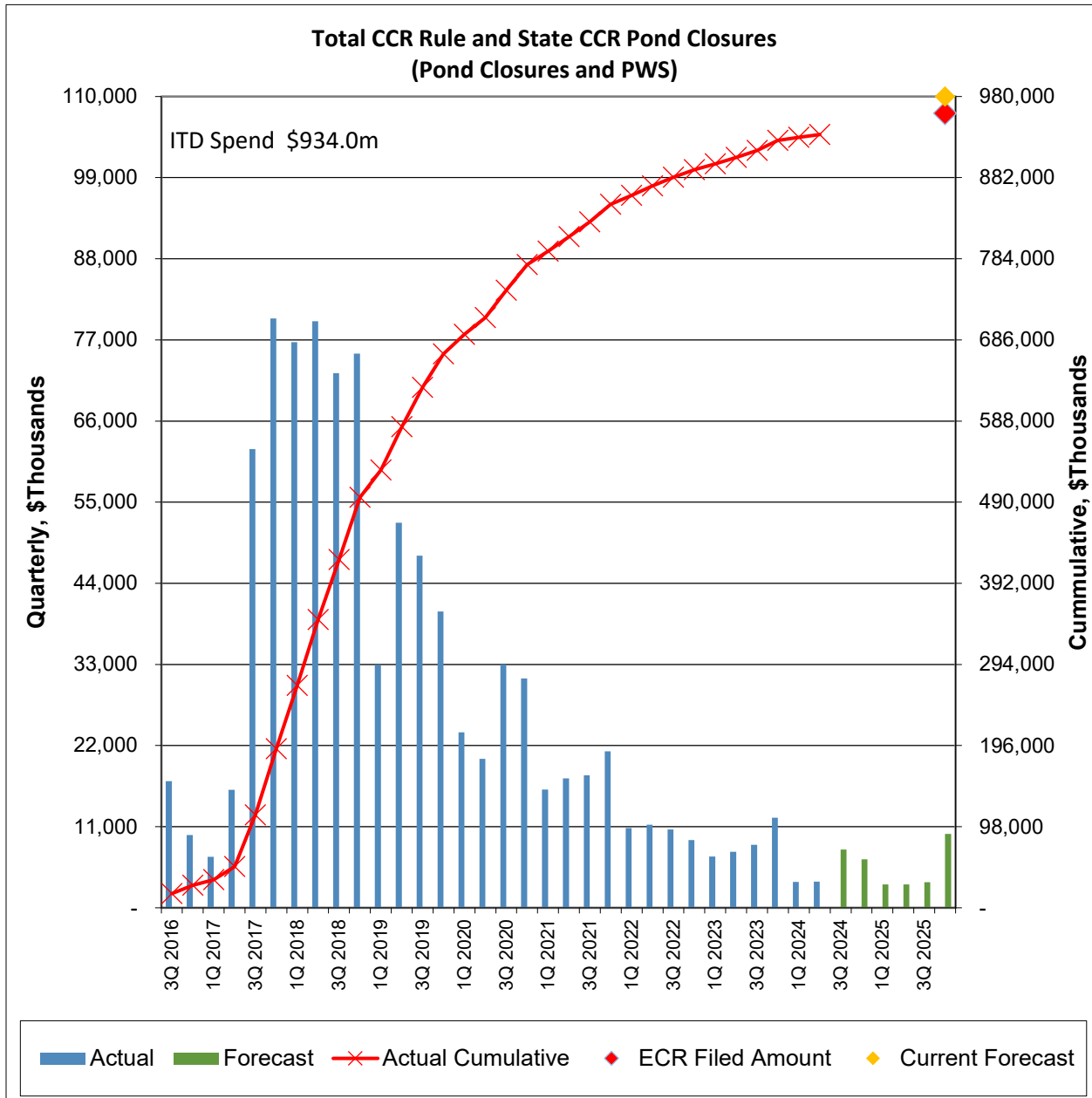
No further work is required.

Financials:

The total 2016 ECR Plan projected cost remained flat at \$1.0102 billion (net), compared to the filed total of \$996.4 million. Total spend through June 30, 2024 increased to \$964.2 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 remained flat at \$980.0 million (net). Total spend through June 30, 2024 has increased to \$934.0 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.



Planned Activities for Next Quarter:

Federal CCR Rule Closure Projects

CCR Closures:

TT will complete the as-built documentation for Phase III closure activities at Ghent and demobilize from site. Upon TT completing the as-built documentation, the Companies will work with AECOM to complete the closure certification documents and record drawings for the Ghent Phase III project. At Trimble County, TT will continue closure activities of the Bottom Ash Pond and Gypsum Storage Pond. TT will complete geomembrane liner installation on the closure cap of Bottom Ash Pond and commence protective cover soil placement. TT will complete removal of the remaining gypsum in the Gypsum Storage Pond and begin the closure by removal verification process. At E.W. Brown, the Companies and WSP will continue to take and analyze dewatering well elevation readings. TT will conduct pilot tests of the two dewatering well networks in July and early August. Upon completion of the pilot tests, adjustments will be made as needed, and the wells will transition into a production water removal phase. Dewatering and treatment is planned to continue through the end of 2024 assuming the system continues to effectively remove interstitial water. Upon completion of dewatering, the well system equipment will be removed and the wells will be retired in place. Regrading of the vegetated cap will commence as well as seeding during the spring of 2025. The Companies will continue to monitor and work through warranty and maintenance issues, on all the projects, should they arise.

PWS Projects:

No anticipated activities for the second quarter of 2024.