

2016 ECR Plan Status Update Report Quarterly Report – Update #33 October 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 third quarter of 2024.

The overall 2016 ECR Plan safety performance through the third 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 \$969.7 million (net) through September 30, 2024.

CCR Compliance (CCR Rule and State CCR Pond Closures)

Safety performance through the third quarter is excellent with a Year-to-Date OSHA Recordable Incident Rate of 0.00 and an Inception-to-Date Recordable Incident Rate of 0.45, 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 September 30, 2024 increased to \$939.5 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 the Companies' 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 18 CCR Rule and State CCR Impoundment Closures. The Companies continue to progress towards completing closure of one remaining CCR impoundment.

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. The Agency has signaled its intention to aggressively re-position its interpretation of the CCR Rule closure processes, through statements in press releases and conduct relating to the state delegation process and interactions with the regulated community. Since these developments could force the regulated community to re-evaluate compliance strategies, that have already been implemented, a number of legal challenges have been initiated.

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, forcing the regulated community to investigate former generating locations to identify, monitor, close, and report on legacy impoundments and other locations where CCR was placed in direct contact with soils, without regard to whether these activities were undertaken/performed with state agency involvement.

For the Companies, the regulation increases the sites that fall under the Rule’s jurisdiction and adds five additional impoundments, two former landfills, and an unknown number of additional CCR management units to the universe of CCR units being federally managed by the Rule. EPA also anticipates finalizing a federal permitting program, for facilities with CCR units. This permit program is expected to be substantially different from the one proposed in February 2020.

LG&E and KU CCR Rule Compliance Strategy and Updates

As previously noted, the Companies track ongoing developments with the CCR Rule because of their 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 the Companies 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. Construction of the closure cap was declared complete in August 2024. TT continues to perform erosion repairs on the vegetative cover and to develop final as-built documentation. The design engineer of record, AECOM, submitted draft record drawings and the construction progress report in September 2024.
- 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 completed the rehabilitation of the existing dewater well system. Each well was tested individually to determine their ability to remove interstitial water. Dewatering wells were then separated into two networks. TT completed a pilot test of the first network in order to determine the appropriate pump speeds for each well and expected removal flow rate from this collection of wells. The second network of well rehabilitation was completed, 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. Production dewatering began August 2024 and is scheduled to continue into 2025 so long as results continue to be favorable.

WSP prepared construction drawings for LG&E-KU review that calls for the modification of the northeast (NE) stormwater ditch. The redesign calls for the removal of the existing fabric-formed concrete ditch liners, upward extension of the NE stormwater inlet riser structure, installation of an additional 4'-0" of soil, and new fabric-formed concrete. Additional ballast for the cap liner system will be provided through this modification providing protection against potential elevated water levels in this area of the impoundment. Drawings will be issued for pricing during 4Q of 2024, with work potentially beginning in early 2025.

- 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 has completed the removal of gypsum from the Gypsum Storage Pond (“GSP”) and is working to complete final grading in the former GSP footprint. TT continued installing geomembrane liner in northeast and center portions of the BAP, completed constructing the northeast and southwest sampling (outfall) structures that will convey stormwater from their respective portions of the BAP cap, and completed 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 Status</u> ³	<u>Planned / Actual In-Service Date</u> ⁴
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	Completed	Cap and Closure Completed 3Q 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 due to project close-out activities.

⁶ Project was placed into service during the 3Q 2024. Charges will continue to accrue into 2025 due to project close-out activities.

PWS Projects

<u>Project</u>	<u>Project #</u>	<u>EPC Status</u> ⁶	<u>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

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

TT completed erosion repairs to the vegetative cover of the ATB #2 cap and construction of the cap was declared complete in August 2024. TT submitted final as-built documentation and demobilized from the site. The design engineer of record, AECOM, submitted draft record drawings and the construction progress report in September 2024.



Phase III Ghent ATB #2 – July 2024



Phase III Ghent ATB #2 – September 2024

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

- The Companies 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. TT completed the removal of gypsum from the GSP and continued excavation the perimeter dikes to lower them to the closure design elevations and grades. TT continued installing geomembrane liner in northeast and center portions of the BAP. TT completed constructing the northeast and southwest sampling (outfall) structures that will convey stormwater from their respective portions of the BAP cap, and completed 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 – July 2024



Trimble BAP – Looking Northeast – September 2024



Trimble GSP – Looking South – July 2024



Trimble GSP – Looking South – September 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 monthly. TT completed the rehabilitation of the existing dewater well system. Each well was tested individually to determine their ability to remove interstitial water. Dewatering wells were then separated into two networks. TT completed a pilot test of first network to determine the flow rate from these wells. The second network of well rehabilitation was completed several weeks after the first. WSP and GWTT (“Ground/Water Treatment and Technology, LLC”) continued to provide technical support and analysis of data. Production dewatering began August 2024 and is scheduled to continue into 2025 pending continued favorable results.

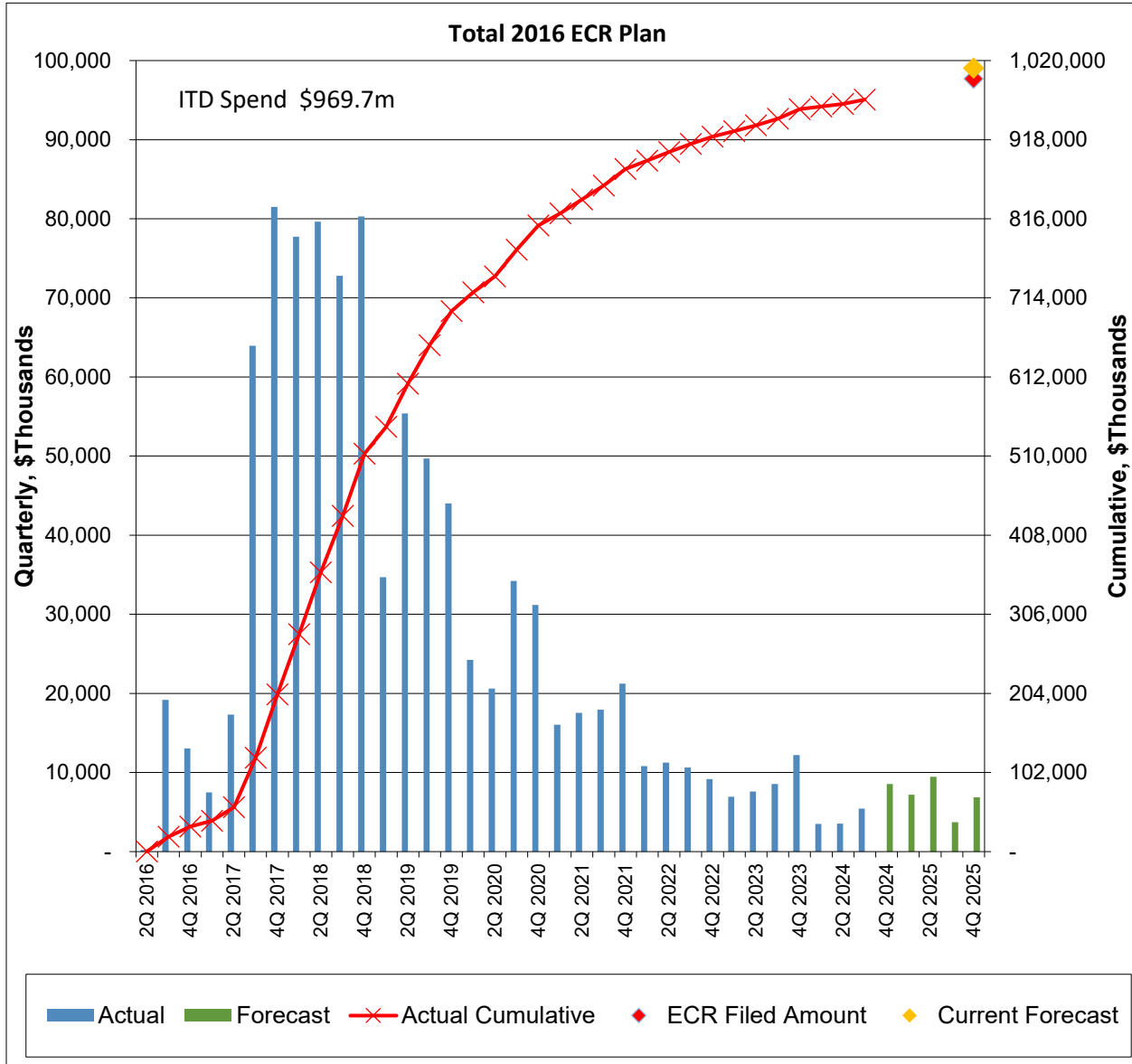
WSP prepared construction drawings for the modification of the northeast (NE) stormwater ditch. The redesign calls for removal of existing fabric-formed concrete ditch liners, upward extension of the NE stormwater inlet riser structure, installation of an additional 4’-0” of soil, and new fabric-formed concrete. Additional ballast for the cap liner system will be provided through this modification providing protection against potential elevated water levels in this area of the impoundment. Drawings will be issued for pricing during 4Q of 2024, with work potentially beginning in early 2025.

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

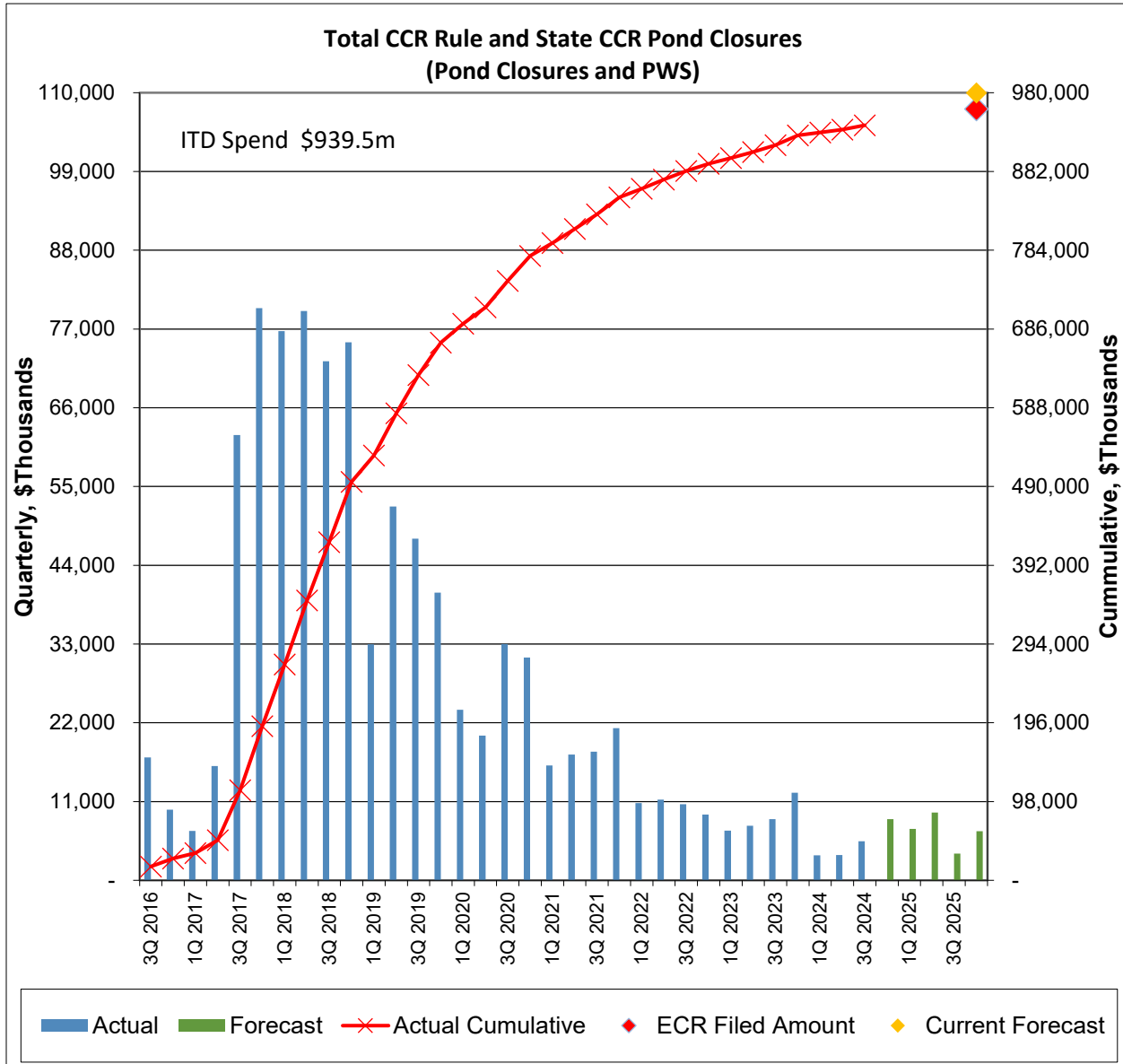
No further work is required.

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 September 30, 2024 increased to \$969.7 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 September 30, 2024 has increased to \$939.5 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:

The Companies will work with AECOM to complete the 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. At E.W. Brown, the Companies and WSP will continue to analyze dewatering well elevation readings. TT will continue to operate and maintain the dewatering well system. Dewatering and treatment will continue into 2025 assuming the system continues to effectively remove interstitial water. Upon completion of dewatering, the well system equipment will be removed and the wells retired in place. Regrading of the vegetated cap and seeding will commence in 2025. A redesign of the NE stormwater ditch will be issued for construction pricing with the goal to begin work in early 2025. The Companies will continue to monitor and work through warranty and maintenance issues, on all the projects, should they arise.

PWS Projects:

Complete. No further work is required.