

2016 ECR Plan Status Update Report Quarterly Report – Update #34 January 30, 2025

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 2024.

The overall 2016 ECR Plan safety performance through the fourth 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 0.41, 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 \$974.5 million (net) through December 31, 2024.

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 0.00 and an Inception-to-Date Recordable Incident Rate of 0.44, 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 December 31, 2024 increased to \$944.4 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. The Companies continue to progress towards completing closure of one remaining CCR impoundment.

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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.



In May 2024, EPA finalized the Legacy CCR Surface Impoundment (Legacy) Rule. This effort expanded the scope of the 2015 CCR Rule to add former generating sites and CCR units to those governed by the Rule. EPA also used this regulatory revision to incorporate more aggressive interpretations into the regulatory process. These changes have potential to alter or reverse near-mature regulatory compliance strategies for many utilities. Given the potential to dramatically affect near complete processes, legal challenges have been initiated and are ongoing.

Recent EPA CCR Rule Initiatives

The changes associated with the Legacy Rule became effective November 8, 2024. These changes add three new sites, and at least five additional units, to those already within the scope of the Companies' CCR Rule compliance efforts. The Companies had already closed the former CCR surface impoundments at these new sites, in accordance with the CCR Rule requirements, but must now establish a groundwater monitoring network for each. Additionally, the Legacy Rule changes force the Companies to identify broadly defined CCR Management Units ("CCRMU") at all eight CCR Rule sites and to establish additional groundwater monitoring systems for those units. As with previously covered CCR sites and units, the additional sites, units, and CCRMU information is to be reported on the publicly accessible LG&E and KU CCR Rule website.

The change in Presidential administrations may potentially result in additional changes to CCR rules and implementation measures.

LG&E and KU CCR Rule Compliance Strategy and Updates

As the last of the CCR impoundment closures near completion, LG&E and KU plan to continue to implement current CCR Rule compliance strategies along with any revisions necessary to meet the requirements of the Legacy Rule. Finally, the Companies will track ongoing developments so that approaches and efforts can be adjusted, if necessary, to assure continued compliance.

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. The design engineer of record, AECOM, submitted final record drawings and the final construction progress report in November 2024. The record drawings were submitted to KDOW and accepted in December 2024, which closed out the ATB-2 closure permit.
- E.W. Brown The Auxiliary Pond dewatering wells were operated from August through December of 2024, having removed roughly 650,000 gallons of a total estimated 2,000,000 gallons. WSP and GWTT ("Ground/Water Treatment and Technology, LLC") continued to provide technical support and analysis of data collected in the field. Production dewatering was suspended in December due to weather conditions, but will continue in 2025, contingent upon continued favorable results of interstitial water removal.



WSP prepared construction drawings detailing modification of the northeast (NE) stormwater ditch. The redesign incorporates 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. This scope was bid and work will potentially commence in the first quarter of 2025.

- Mill Creek Project was completed in 2022. No further work is required.
- Trimble County TT continued hauling CCR material to the Bottom Ash Pond ("BAP") for beneficial use and substantially achieved final design subgrade in the remaining areas of the BAP. Therefore, TT has completed hauling CCR material to the BAP for beneficial use. TT continued managing stormwater runoff in the BAP and placed the new KPDES Outfall 010 in service, which receives non-contact stormwater runoff from the lined area of the BAP. TT continued installing geomembrane liner in BAP, completed demolition and modification of the MSE wall in the northeast corner per design, and began hauling and placing protective cover soil over lined areas. The former Gypsum Storage Pond ("GSP"), which no longer contains CCRs, saw minor grade work performed and was maintained in a stable condition. Further work will resume in the former GSP footprint in 2025.
- 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.

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² The recent Legacy Rule revisions are significant and additional changes may result from the change in the Presidential administrations. However, the Companies' strategies continue to be resilient and absent major regulatory developments, the Companies 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>	Project #	EPC Status ³	Planned / Actual In-Service Date 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 ⁶
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 was completed in the 3Q 2024.

⁵ Project was placed into service during the 4Q 2022. Charges will continue to accrue into 2025 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>	Project #	EPC Status ⁷	Actual In Service Date
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

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 $^{^{7}}$ 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

The design engineer of record, AECOM, submitted final record drawings and the final construction progress report for ATB-2 in the fourth quarter 2024. The KDOW accepted in December, which closed out the ATB-2 closure process.





Phase III Ghent ATB #2 – September 2024



Phase III Ghent ATB #2 – December 2024



KU Project 41 and LG&E Project 30⁸ – Trimble County (TC) Station CCR Rule Compliance Construction and New PWS

The Companies continue to hold weekly and monthly project update meetings. TT completed hauling CCR material to the Bottom Ash Pond ("BAP") for beneficial use due to substantially achieving final design subgrade throughout the pond. Grading activities associated with the liner subgrade are nearing completion within the BAP. TT continues removal of stormwater runoff from the BAP and GSP; placed the new KPDES Outfall 010 in service, which receives non-contact stormwater from the lined area of the BAP; and completed demolition and modification of the MSE wall in the northeast corner of the BAP. TT completed the removal of gypsum from the GSP and continued excavating the perimeter dikes to lower them to the closure design elevations and grades. TT continued installing geomembrane liner in the BAP and began hauling and placing protective cover soil over lined areas.

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⁸ KU and LG&E's net costs are split 48% and 52%, respectively.





Trimble BAP – Looking Northeast – September 2024



Trimble BAP – Looking Northeast – December 2024





Trimble GSP – Looking South – September 2024



 $Trimble \; GSP-Looking \; South-December \; 2024$



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

• E.W. Brown – The Auxiliary Pond dewatering wells were operated from August through December of 2024, having removed roughly 650,000 gallons of a total estimated 2,000,000 gallons. WSP and GWTT ("Ground/Water Treatment and Technology, LLC") continued to provide technical support and analysis of data collected in the field. Production dewatering was suspended in December due to weather conditions, but will continue in 2025, contingent upon continued favorable results.

WSP prepared construction drawings detailing the modification of the northeast (NE) stormwater ditch. The redesign incorporates 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. This scope was bid and work will potentially commence in the first quarter of 2025.

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

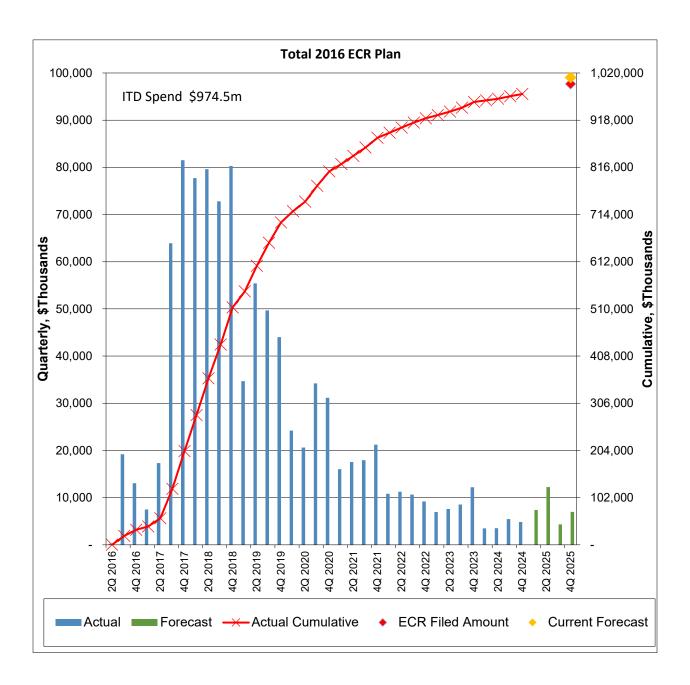
No further work is required.

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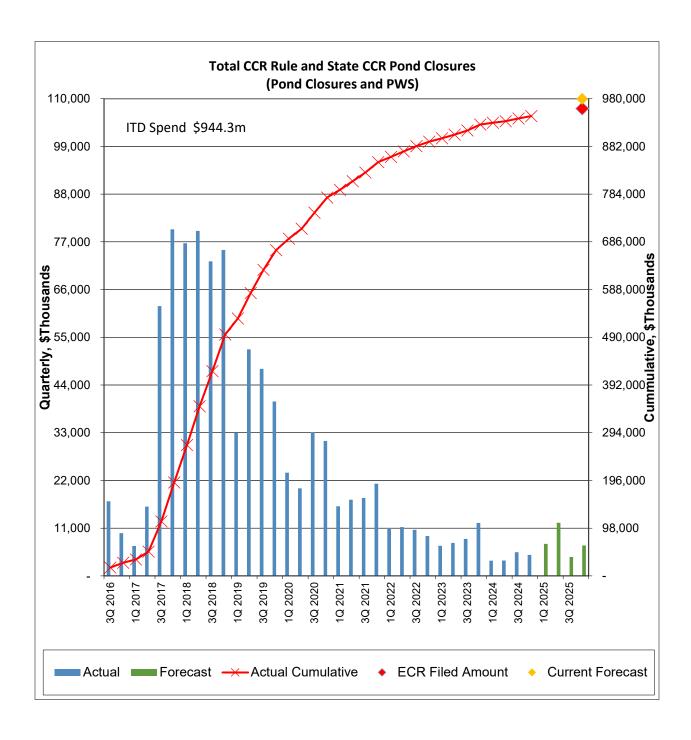
Financials:

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 December 31, 2024 increased to \$974.5 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 December 31, 2024 has increased to \$944.4 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:

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 continue 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. The NE stormwater ditch design work is targeted to be awarded and work may commence in the first quarter of 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.