

# 2016 ECR Plan Status Update Report Quarterly Report – Update #31 April 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 first quarter of 2024.

The overall 2016 ECR Plan safety performance through the first 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)<sup>1</sup>, 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 \$960.7 million (net) through March 31, 2024.

# **CCR Compliance (CCR Rule and State CCR Pond Closures)**

Safety performance through the first 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 March 31, 2024 increased to \$930.5 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 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.

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<sup>&</sup>lt;sup>1</sup> 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 April 25, 2024, EPA released a pre-publication version of the final CCR Legacy Surface Impoundment Rule, which the Companies are currently reviewing to determine impacts to ongoing projects and to establish future compliance strategy. This regulation significantly expands the scope of CCR regulatory authority to include not only CCR surface impoundments that existed prior to the 2015 Rule effective date, but also any locations at power plant sites where CCR was placed in direct contact with soil, without regard to whether that action was performed with state oversight and approval or the placement was executed as a beneficial use for structural fill or some other legitimate, state-approved purpose. For the Companies, the regulation significantly increases the number of units that the Companies will manage under the federal CCR program. More broadly, EPA's approach results in additional uncertainty and confusion due to potential conflict with prior decisions of state environmental regulatory agencies that have enforced EPA's delegated authority for all environmental programs.

#### 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 continues working to establish and maintain the vegetative cover and develop final as-built documentation. TT continues to progress the Ghent projects very well 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. WSP and Project Engineering finalized a scope of work to rehabilitate the existing dewatering wells so that dewatering can recommence. PE requested that Tetra Tech, the CCR impoundment closure contractor at Ghent and Trimble County Stations, review the scope of work and provide a proposal. A proposal was



received during the first quarter of 2024 with the intent to issue a contract to allow for mobilization during April of 2024.

- 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 began removing the existing liner system from the bottom of the GSP and undercutting as part of the closure by removal process.
- Tyrone Project completed in the second quarter of 2020. No further work is planned at Tyrone.

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.<sup>2</sup>

# 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.

<sup>&</sup>lt;sup>2</sup> 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>	Project #	EPC Status <sup>3</sup>	Planned / Actual In-Service Date <sup>4</sup>
E.W. Brown Aux Pond	KU Project 42	Awarded July 9, 2018	Closure Completed 4Q 2022 <sup>5</sup>
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	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

<sup>&</sup>lt;sup>3</sup> Engineering, Procurement, and Construction ("EPC") Status – the red font signifies actuals.

<sup>4</sup> 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.

<sup>5</sup> 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>	Project #	EPC Status <sup>6</sup>	<u>Actual</u> <u>In-Service Date</u> <sup>4</sup>
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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 $<sup>^{\</sup>rm 6}$  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 update will be provided.

### **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 has completed the closure cap on ATB #2 and continues working to establish and maintain vegetative cover on the cap. TT continues working to restore on site borrow areas and perform site cleanup activities, as well as compile and develop final as-built documentation. TT continues to progress the Ghent projects very well with no compliance issues forecasted.

6





Phase III Ghent ATB #2 – December 2023



Phase III Ghent ATB #2 – March 2024



# KU Project 41 and LG&E Project $30^7$ – Trimble County (TC) Station CCR Rule Compliance Construction and New PWS

LG&E and KU continues 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; continued construction of access roads and rim ditches in the GSP; continued mass excavation of gypsum within the GSP and transporting it to the BAP to be used as beneficial use fill material; and began removing existing liner from the bottom of the GSP and undercutting as part of the closure by removal process.

8

 $<sup>^7</sup>$  KU and LG&E's net costs are split 48% and 52%, respectively.





Trimble BAP – Looking Northeast – December 2023



Trimble BAP – Looking Northeast – March 2024





Trimble GSP – Looking South –December 2023



Trimble GSP – Looking South – March 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. WSP and Project Engineering finalized a scope of work to rehabilitate the existing dewatering wells so that dewatering can recommence. PE requested that Tetra Tech, the CCR impoundment closure contractor at Ghent and Trimble County Stations, review the scope of work and provide a proposal. A proposal was received during the first quarter of 2024 with the intent to issue a contract to allow for mobilization during April of 2024.

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

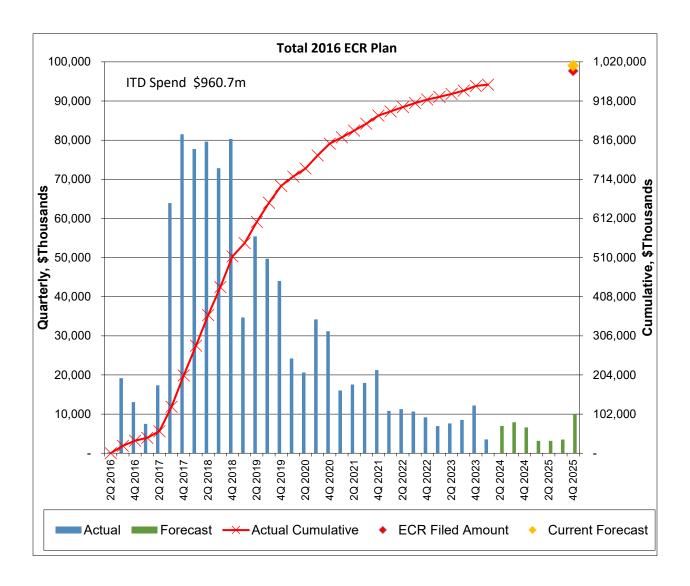
No further work is required.

11



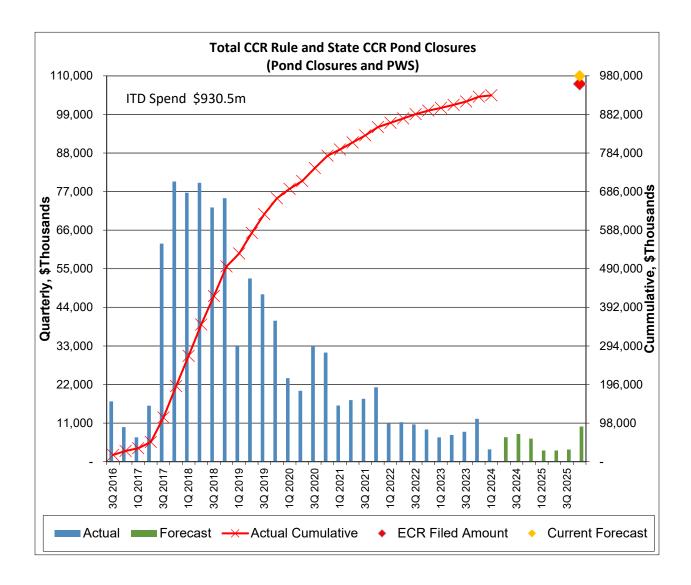
# **Financials:**

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 March 31, 2024 increased to \$960.7 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 March 31, 2024 has increased to \$930.5 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:**

TT will complete the Phase III closure activities at Ghent and continue closure activities on the Trimble County Bottom Ash Pond and Gypsum Storage Pond. The Companies will work with AECOM to develop the required closure certification documents and record drawings for the Ghent Phase III project. At E.W. Brown, the Companies and WSP will continue to take and analyze dewatering well elevation readings. TT will be contracted to rehabilitate the dewatering well system, conduct a pilot test, and resume dewatering of the impoundment. Dewatering is planned to extend into the 4th quarter of 2024 assuming the system continues to effectively remove interstitial water. 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.