

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF KENTUCKY)	
UTILITIES COMPANY FOR A CERTIFICATE)	CASE NO.
OF PUBLIC CONVENIENCE AND NECESSITY)	2017-00483
AND APPROVAL OF AMENDMENT TO ITS)	
2016 COMPLIANCE PLAN FOR RECOVERY)	
BY ENVIRONMENTAL SURCHARGE)	

ORDER

On January 26, 2018, Kentucky Utilities Company (“KU”) filed an application, pursuant to KRS 278.020(1), KRS 278.183, and 807 KAR 5:001, Sections 14 and 15, requesting approval to amend KU’s 2016 Environmental Compliance Plan (“2016 ECR Plan”), and approval of a Certificate of Public Convenience and Necessity (“CPCN”). KU requests a CPCN to construct a smaller coal combustion residuals landfill (“CCR Landfill”) than the Commission previously approved to be constructed at the E.W. Brown Generating Station (“Brown”), and to cap and close the remaining surface area of the main ash pond (“Main Ash Pond”) at Brown (“Amended Project 36”). KU also requests approval to amend its 2016 ECR Plan to recover the capital cost of Amended Project 36 through KU’s ECR Surcharge tariff and approval of proposed modifications to the environmental surcharge form, ES Form 2.01. Lastly, KU requests the Commission issue an Order approving its application by July 25, 2018, so that KU can timely begin construction and place the proposed facilities into operation before the storage capacity of Phase I of the landfill is depleted in 2020.

No party requested to intervene in this matter. Pursuant to a procedural schedule established on February 29, 2018, KU responded to two discovery requests. KU also responded to a discovery request made pursuant to an informal conference that was held on May 18, 2018. On June 21, 2018, a public comment hearing was held at the Commission's offices. This matter now stands submitted for a decision.

AMENDED PROJECT 36

Background

KU designs and constructs CCR landfills using a phased approach to avoid the cost of constructing an entire landfill footprint that may not be needed if generation needs or regulations change.¹ Under KU's phased approach, subsequent landfill phases are constructed only when and as needed. KU planned to convert the Main Ash Pond at Brown to a dry-storage CCR landfill in three phases.² Pursuant to a permit ("Special Waste Permit") issued by the Kentucky Division of Waste Management, KU planned to cap and close the Main Ash Pond and construct a landfill over the entire Main Ash Pond surface area to store CCR produced at Brown. A CPCN for Phase I of the landfill conversion was approved in Case No. 2011-00161 and Phase I became operational in September 2016.³

¹ Direct Testimony of R. Scott Straight ("Straight Testimony") at 3.

² Direct Testimony of Robert M. Conroy ("Conroy Testimony") at 3-4; KU's Response to Staff's First Request for Information ("Staff's First Request"), Item 8.

³ Case No. 2011-00161, *Application of Kentucky Utilities Company for Certificates of Public Convenience and Necessity and Approval of Its 2011 Compliance Plan for Recovery by Environmental Surcharge* (Ky. PSC Dec. 15, 2011); Straight Testimony, Exhibit RSS-1 at 1.

A CPCN for Phase II was approved in Case No. 2016-00026 (“Project 36”), but Phase II was never constructed.⁴ In that proceeding, KU explained that, even if a CPCN was granted, it would continue to evaluate conditions that could affect the projected timing of and need for construction of Phase II.⁵ Based upon KU’s evaluation, construction of Phase II was delayed because decreased CCR production from the Brown generating units reduced the need for Phase II.⁶ The CPCN for Phase II lapsed in August 2017, pursuant to KRS 278.020(1), which voids a CPCN that is not exercised within one year of issuance. Phase I is now reaching capacity, and, to remain in compliance with federal environmental regulations, KU must begin constructing Phase II of the landfill.⁷

Amended Project 36

KU requests to amend Project 36 and seeks a CPCN to 1) construct Phase II of the CCR Landfill with a smaller footprint and capacity than previously approved by the Commission (“Amended Phase II”); and 2) cap and close the remaining surface area of the Main Ash Pond that is outside the footprint of the modified CCR Landfill.⁸ If approved, construction of Amended Project 36 is expected to begin in August 2018 and be completed by December 2019.⁹

⁴ Case No. 2016-00026, *Application of Kentucky Utilities Company for Certificates of Public Convenience and Necessity and Approval of Its 2016 Compliance Plan for Recovery by Environmental Surcharge* (Ky. PSC Aug. 8, 2016).

⁵ Conroy Testimony at 4.

⁶ *Id.*

⁷ Direct Testimony of Gary H. Revlett (“Revlett Testimony”), at 5.

⁸ Straight Testimony at 4.

⁹ Application at 5–6.

In support for its request to amend Project 36 by reducing the footprint of the CCR Landfill, KU explains that, based upon an analysis of its long-term generation needs, Brown Units 1 and 2 will be retired by February 2019.¹⁰ According to KU, it is not financially prudent to construct Phases II and III of the CCR Landfill as originally designed because, with the retirement of Brown Units 1 and 2, the volume of CCR generated at Brown will be significantly reduced.¹¹ The CCR Landfill was designed to provide approximately 8.5 million cubic yards (“MCY”) of capacity once all three phases were completed.¹² With the forecasted reduction in CCR production, KU estimates that its CCR storage need is 2.5 MCY.¹³ KU concluded that a smaller Phase II footprint would meet the CCR storage capacity for the projected remaining life of coal-fired generation at Brown, and that Phase III was no longer necessary.¹⁴

The design of Amended Phase II landfill is similar to the design of the Phase I landfill that was approved by the Commission in Case No. 2011-00161.¹⁵ The landfill utilizes a bottom liner system with a dual function as a leachate liner for the entire landfill, and as the cap and closure liner for the Main Ash Pond.¹⁶

¹⁰ Conroy Testimony at 4–5. KU announced the Brown Unit retirements in November 2017.

¹¹ Application at 4; Conroy Testimony at 5.

¹² Straight Testimony at 5.

¹³ *Id.*

¹⁴ *Id.*; Direct Testimony of Stuart A Wilson (“Wilson Testimony”), Exhibit SAW-1 at 4. Brown Unit 3 is projected to retire in 2036 after 65 years in operation.

¹⁵ Straight Testimony at 5.

¹⁶ KU’s Response to Staff’s First Request, Item 8.

In support for its request to amend Project 36 by capping and closing the remaining area of the Main Ash Pond, KU explained that the Special Waste Permit requires the closure of the entire surface area of Main Ash Pond.¹⁷ As designed, the 100-acre surface area of the Main Ash Pond would be capped and closed in three, equal-sized phases.¹⁸ With the reduced footprint of Amended Phase II and the elimination of Phase III, there will be surface area of the Main Ash Pond that is outside the footprint of Phase I and Amended Phase II of the CCR Landfill that also must be capped and closed.¹⁹

KU proposes to use the same method to cap and close the Main Ash Pond that was approved for the closure of the Green River, Pineville, and Tyrone ash ponds in Case No. 2016-00026.²⁰ The same liner system that underlies the landfill will be used to cap and close the Main Ash Pond; the liner system consists of clay subgrade, geotextile, clay liner, flexible membrane liner, draining layer, 18 inches of soil, and six inches of topsoil.²¹

In Case No. 2016-00026, the Commission found that Project 36 was necessary in order for KU to comply with the United States Environmental Protection Agency's ("EPA") Disposal of Coal Combustion Residuals from Electric Utilities ("CCR Rule") and Kentucky environmental regulations as set forth in the Special Waste Permit.²² In its request for an Amended Project 36, KU states that the Amended Phase II construction of the CCR

¹⁷ Straight Testimony at 6.

¹⁸ *Id.*, Exhibit RSS-1 at 1.

¹⁹ *Id.* at 6.

²⁰ *Id.*

²¹ KU's Response to Staff's First Request, Item 8.

²² Conroy Testimony at 3.

Landfill continues to be necessary to remain in compliance with the federal CCR Rule.²³ KU explains that the CCR Rule, which was finalized in October 2015, establishes stringent requirements for CCR landfills and surface impoundments to address environmental and safety risks associated with the disposal and storage of CCR.²⁴ KU notes that the EPA proposed a rule change in March 2018 that remands portions of the CCR Rule, however, the proposed change will not impact the requirements associated with the Amended Phase II of the CCR Landfill, or the timing or design requirements to close CCR impoundments.²⁵

In addition to complying with the federal CCR Rule, the capping and closing of the Main Ash Pond continue to be necessary to comply with Kentucky environmental regulations as set forth in the Special Waste Permit.²⁶ Because the entire Main Ash Pond must be closed, any surface area of the Main Ash Pond that remains outside the footprint of the CCR Landfill must be closed per the Special Waste Permit requirements.²⁷

Capital, and Operating and Maintenance (“O&M”) Costs

The estimated capital cost for Amended Project 36 is \$14.7 million, with an \$8.9 million estimated capital cost for the Amended Phase II landfill and a \$5.8 million estimated capital cost for the Main Ash Pond closure.²⁸ The \$14.7 million estimated

²³ Application at 3–4; Revlett Testimony at 1.

²⁴ Revlett Testimony at 2.

²⁵ *Id.* at 3; KU’s Response to Staff’s First Request, Item 9.

²⁶ Revlett Testimony at 5.

²⁷ *Id.*

²⁸ Application at 6.

capital cost is a reduction from the \$28 million projected capital cost to construct both Phase II and III.²⁹ KU intends to finance the cost of Amended Project 36 through a combination of new debt and equity; the proposed financing is identical to the proposed financing of its 2016 ECR Plan that was previously approved by the Commission.³⁰ KU requests approval to recover the capital costs of Amended Project 36 through the ECR surcharge effective for bills rendered on and after August 30, 2018, that reflect the expense month July 2018.³¹ The estimated bill impact for Amended Project 36 is an increase of 0.08% in 2018 increased to 0.19% in 2020.³² The estimated bill impact for Amended Project 36 reflects the impact of the Tax Cut and Jobs Act, with the reduction in the corporate tax rate from 35 percent to 21 percent, and the elimination of bonus tax depreciation.³³ KU does not propose any changes to its existing tariff, Rate Schedule ECR.³⁴

KU explains that it seeks to recover only the capital costs and not the incremental operating and maintenance (“O&M”) costs for Amended Project 36 through the ECR surcharge in KU’s 2016 ECR Plan. Currently, KU recovers the O&M costs for Phase I of the CCR Landfill through its environmental surcharge as part of Project 29 in KU’s 2011 ECR Plan. KU states that Amended Phase II of the CCR Landfill will not create incremental O&M costs and that O&M costs for Amended Phase II are not distinguishable

²⁹ Conroy Testimony at 14; May 18, 2018 Informal Conference Memorandum, Attachment at 9.

³⁰ Application at 7.

³¹ *Id.* at 9–10; Conroy Testimony at 8.

³² Conroy Testimony at 12.

³³ *Id.*

³⁴ *Id.* at 9.

from the O&M costs for Phase I. KU proposes to recover O&M costs for Phases I and II through the environmental surcharge as part of Project 29 in KU's 2011 ECR Plan.

In its economic analysis of the Amended Project 36, KU evaluated constructing the proposed Amended Phase II landfill against two other alternatives: beneficial-use markets and transporting the CCR to the nearest municipal landfill.³⁵ KU did not consider an alternative to capping and closing the Main Ash Pond because the Special Waste Permit requires that the Main Ash Pond be capped and closed.³⁶ Regarding the beneficial-use market, KU signed an agreement that provides a fly ash marketer the option to market Brown Unit 3's fly ash for offsite beneficial use, which has not yet been exercised.³⁷ KU contends that there are limited prospects for beneficially using gypsum produced at Brown because the gypsum moisture content exceeds most beneficial-use market limits.³⁸ Regarding the alternative of transporting CCR to the nearest landfill, KU's economic analysis indicated that the proposed Amended Phase II landfill was the lower-cost alternative, given that both the capital and variable costs for the municipal landfill alternative were higher on a present-value revenue requirement basis across three gas price scenarios (low, mid, and high).³⁹ This is especially so given that a municipal landfill must comply with the same environmental regulations as KU, but with added

³⁵ Wilson Testimony at 4–6.

³⁶ *Id.* at 8.

³⁷ *Id.* at 4; KU's Response to Staff's First Request, Item 11.

³⁸ Wilson Testimony at 4.

³⁹ *Id.* at 7–8.

transportation costs. Additionally, the municipal landfill option provided less incremental capacity than constructing the Amended Phase II landfill.

Amortization of Main Ash Pond Closure Costs and Revised Form ES 2.01

KU requests authority to amortize the actual costs to cap and close the Main Ash Pond on a non-levelized basis over eight years.⁴⁰ The actual costs incurred on a monthly basis for surface-impoundment closure will become part of the total amount to be amortized and collected through the ECR surcharge. KU explains that the eight-year amortization period comports with the probable retirement years of 2023 for Brown Unit 1 and 2029 for Brown Unit 2 utilized in the most recent depreciation study.⁴¹ KU states that the Commission approved a non-levelized, ten-year amortization period for KU's Green River, Pineville, and Tyrone Generating Stations' ash pond closures in Case No. 2016-00026.⁴² KU asserts that the eight-year amortization period requested in this case is consistent with the ten-year period approved for Green River, Pineville, and Tyrone ash pond closures, less the two years of elapsed time since the Order approving the ten-year amortization period in Case No. 2016-00026. KU contends that aligning the amortization period for the Main Ash Pond closure with the Green River, Pineville, and Tyrone ash pond closures results in accounting efficiencies.⁴³ KU also asserts that establishing a different amortization period exacerbates complex accounting for CCR costs because KU

⁴⁰ Conroy Testimony at 10.

⁴¹ KU's Response to Commission Staff's First Request, Item 4.

⁴² Conroy Testimony at 10.

⁴³ *Id.* at 10; KU's Response to Staff's First Request, Item 4.

is regulated in multiple jurisdictions.⁴⁴ KU intends to include the unamortized balance of its actual costs incurred for the cap and closure portion of Amended Project 36 in its ECR rate base, which is consistent with the amortization method and recovery period approved by the Commission for other surface-impoundment closures for KU and its sister company Louisville Gas & Electric Company.⁴⁵

KU requests to modify ES Form 2.01 to include “Amended Project 36 – Brown Station (Main Pond)” to the form and to modify an existing label to read “Project 42 – Brown Station (Aux. Pond).”

Return on Equity (“ROE”)

Consistent with the 9.70 percent ROE the Commission authorized in KU’s most recent two-year ECR review proceeding,⁴⁶ KU proposes to use a 9.70 percent ROE in the calculation of the environmental surcharge until KU’s next base rate case.

LEGAL STANDARDS

CPCN

The Commission’s standard of review regarding a CPCN is well settled. Under KRS 278.020(1), no utility may construct or acquire any facility to be used in providing utility service to the public until it has obtained a CPCN from this Commission. To obtain

⁴⁴ KU’s Response to Staff’s First Request, Item 4. In addition to this Commission, KU is regulated by the Federal Energy Regulatory Commission and the Virginia State Corporation Commission.

⁴⁵ Case No. 2016-00026, *The Application of Kentucky Utilities Company for Certificates of Public Convenience and Necessity and Approval of its 2016 Compliance Plan for Recovery by Environmental Surcharge* (Ky. PSC Aug. 8, 2016), Order at 18–19; Case No. 2004-00421, *The Application of Louisville Gas and Electric Company for Approval of Its 2004 Compliance Plan for Recovery by Environmental Surcharge*, (Ky. PSC June 20, 2005), Order at 9–10.

⁴⁶ Case No. 2017-00266, *Electronic Examination by the Public Service Commission of the Environmental Surcharge Mechanism of Kentucky Utilities Company for the Two-Year Billing Period Ending April 30, 2017* (Ky. PSC Dec. 19, 2017).

a CPCN, the utility must demonstrate a need for such facilities and an absence of wasteful duplication.⁴⁷

“Need” requires:

[A] showing of a substantial inadequacy of existing service, involving a consumer market sufficiently large to make it economically feasible for the new system or facility to be constructed or operated.

[T]he inadequacy must be due either to a substantial deficiency of service facilities, beyond what could be supplied by normal improvements in the ordinary course of business; or to indifference, poor management or disregard of the rights of consumers, persisting over such a period of time as to establish an inability or unwillingness to render adequate service.⁴⁸

“Wasteful duplication” is defined as “an excess of capacity over need” and “an excessive investment in relation to productivity or efficiency, and an unnecessary multiplicity of physical properties.”⁴⁹ To demonstrate that a proposed facility does not result in wasteful duplication, we have held that the applicant must demonstrate that a thorough review of all reasonable alternatives has been performed.⁵⁰ Selection of a proposal that ultimately costs more than an alternative does not necessarily result in

⁴⁷ *Kentucky Utilities Co. v. Pub. Serv. Comm’n*, 252 S.W.2d 885 (Ky. 1952).

⁴⁸ *Id.* at 890.

⁴⁹ *Id.*

⁵⁰ Case No. 2005-00142, *Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for the Construction of Transmission Facilities in Jefferson, Bullitt, Meade, and Hardin Counties, Kentucky* (Ky. PSC Sept. 8, 2005).

wasteful duplication.⁵¹ All relevant factors must be balanced.⁵² The statutory touchstone for ratemaking in Kentucky is the requirement that rates set by the Commission must be fair, just, and reasonable.⁵³

ECR Mechanism

KRS 278.183(1), commonly known as the Environmental Surcharge Statute, provides, in pertinent part, as follows:

Notwithstanding any other provision of this chapter, effective January 1, 1993, a utility shall be entitled to the current recovery of its costs of complying with the Federal Clean Air Act as amended and those federal, state, or local environmental requirements which apply to coal combustion wastes and by-products from facilities utilized for production of energy from coal in accordance with the utility's compliance plan as designated in subsection (2) of this section. These costs shall include a reasonable return on construction and other capital expenditures and reasonable operating expenses for any plant, equipment, property, facility, or other action to be used to comply with applicable environmental requirements set forth in this section. Operating expenses include all costs of operating and maintaining environmental facilities, income taxes, property taxes, other applicable taxes and depreciation expenses as these expenses relate to compliance with the environmental requirements set forth in this section.

The Environmental Surcharge Statute allows a utility to recover its qualifying environmental costs through a ratemaking procedure that is an alternative to the filing of

⁵¹ See *Kentucky Utilities Co. v. Pub. Serv. Comm'n*, 390 S.W.2d 168, 175 (Ky. 1965). See also Case No. 2005-00089, *The Application of East Kentucky Power Cooperative, Inc. for a Certificate of Public Convenience and Necessity to Construct a 138 kV Electric Transmission Line in Rowan County, Kentucky* (Ky. PSC Aug. 19, 2005).

⁵² Case No. 2005-00089, *East Kentucky Power Cooperative, Inc.* (Ky. PSC Aug. 19, 2005), Final Order at 6.

⁵³ KRS 278.190(3).

a general rate case under KRS 278.190. The Environmental Surcharge Statute specifies: (1) the categories of costs that can be recovered by surcharge; (2) the procedures which must be followed by a utility to obtain approval of its environmental plan and surcharge; (3) the procedures and evidentiary standard to be applied by the Commission in reviewing applications for approval of an environmental plan and rate charge; and (4) the mandatory filing requirements and periodic reviews of an approved surcharge. The Commission must consider the plan and the proposed rate surcharge, and approve them if it finds the plan and rate surcharge to be reasonable and cost-effective. As part of the consideration of an environmental plan and surcharge, the Commission is required by KRS 278.183(2)(b) to “[e]stablish a reasonable return on compliance-related capital expenditures.”

FINDINGS

Having reviewed the record and being otherwise sufficiently advised, the Commission finds that KU has sufficiently established a need for the proposed Amended Project 36 in order to achieve compliance with the CCR Rule and Kentucky environmental regulations. The Commission also finds that the proposed Amended Project 36 is the lowest-reasonable-cost alternative to achieve compliance with the relevant environmental statute and regulations. The Commission notes that KU’s economic analyses of Amended Project 36 contains reasonable assumptions and alternatives, and are based on appropriate methodologies. We further note that KU’s economic analyses showed that the proposed environmental projects are the lowest-reasonable-cost alternatives. The Commission finds that the proposed projects will not result in wasteful duplication of similar or alternative facilities or construction. Thus, the Commission finds that KU’s 2016

Plan as amended by Amended Project 36 to recover the costs of the pollution-control construction through its ECR Surcharge tariff is reasonable.

Therefore, the Commission concludes that the impoundment-related closure construction is required under applicable environmental regulations in order to assure meeting those regulations, and that the proposed environmental compliance construction project is the least-cost reasonable solution in meeting those requirements.

Accordingly, the Commission finds that KU's proposed accounting treatment, timing, and recovery of costs involved in the proposed Amended Project 36 is reasonable and should be approved.

IT IS THEREFORE ORDERED that:

1. KU is granted a CPCN for Amended Project 36, the construction of Amended Phase II of the landfill at Brown, and the capping and closing of Main Ash Pond as described in KU's application.
2. KU's 2016 ECR Plan, consisting of Projects 36, 37, 38, 39, 40, 41 and 42, is approved.
3. The proposed revisions and additions to KU's monthly ES Form 2.01 are approved.
4. KU shall use a 9.70 percent ROE in the ECR mechanism for Amended Project 36.
5. Within ten days of the date of this Order, KU shall file with the Commission revised tariff sheets setting out Rate Schedule ECR as approved herein and reflecting that it was approved pursuant to this Order.

6. KU shall promptly file with the Commission a notice and supporting analysis in the event that a new or revised environmental requirement impacts any facility in service or under construction.

7. KU shall submit status update reports on the construction and implementation of the proposed projects contained in its Amended Project 36 every three months, beginning with the next scheduled filing date after the date of entry of this Order for filing the status update reports for KU's 2016 Plan. Such reports shall include, among other things, detailed information regarding the amount spent to date, the amount spent during the reporting period, the projected budget for the next reporting period, the total projected costs of the Amended Project 36, construction activities that occurred during the reporting period, and the construction activities for the next reporting period.

8. Any documents filed in the future pursuant to ordering paragraphs 6 and 7 shall reference this case number and shall be retained in the utility's general correspondence files.

9. The Executive Director is delegated authority to grant a reasonable extension of time for the filing of any documents required by ordering paragraphs 6 and 7 of this Order upon KU's showing of good cause.

By the Commission

ENTERED
JUL 09 2018
KENTUCKY PUBLIC
SERVICE COMMISSION

ATTEST:


Executive Director

Case No. 2017-00483

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