COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY FOR CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY AND APPROVAL OF ITS 2016 COMPLIANCE PLAN FOR RECOVERY BY ENVIRONMENTAL SURCHARGE	)))))	CASE NO. 2016-00027

ORDER

On January 29, 2016, Louisville Gas and Electric Company ("LG&E") tendered for filing an application requesting two Certificates of Public Convenience and Necessity ("CPCN") and approval of an amended environmental compliance plan. One CPCN is for Project 29, consisting of surface-impoundment-related construction and a new process-water system at the Mill Creek Generating Station ("Mill Creek"); the other is for Project 30, consisting of surface-impoundment-related construction and a new process-water system at the Trimble County Generating Station ("Trimble County"). According to LG&E, the surface-impoundment-related construction, consisting of closing five surface impoundments at Mill Creek and two at Trimble County, is necessary to comply with the U.S. Environmental Protection Agency's ("EPA") Disposal of Coal Combustion Residuals from Electric Utilities final rule ("CCR Rule"), while the new process-water systems are required to continue operating those generating stations without the surface impoundments.

LG&E's requests for approval of its amended environmental compliance plan ("2016 Plan") is for the purpose of recovering the costs of the surface-impoundment-

related and process-water systems construction and proposed new pollution-control facilities through its Environmental Cost Recovery ("ECR") Surcharge tariff. LG&E asserts that the projects included in its application are required for compliance with the federal Clean Air Act ("CAA"), as amended, the CCR Rule, the Mercury and Air Toxics Standards Rule ("MATS Rule"), and other environmental requirements that apply to LG&E facilities used in the production of energy from coal.

On February 5, 2016, LG&E's application was rejected because it failed to comply with KRS 322.340. On February 9, 2016, LG&E filed revisions which cured the deficiency, and the application was accepted for filing as of that date. Upon reviewing LG&E's application, the Commission found that an investigation would be necessary to determine the reasonableness of the application. Accordingly, the Commission issued an Order on February 26, 2016, establishing a procedural schedule that provided for, among other things, two rounds of discovery on LG&E's application, an opportunity for the filing of intervenor testimony, one round of discovery upon intervenor testimony, and an opportunity for LG&E to file rebuttal testimony. An information session and public meeting was held in Louisville, Kentucky, on May 23, 2016, to receive public comments on the 2016 Plan and associated environmental surcharge requests submitted by LG&E.

Kentucky Industrial Utility Customers, Inc. ("KIUC") and the Attorney General of the Commonwealth of Kentucky, by and through his Office of Rate Intervention ("AG"), filed for, and were granted, intervention in this matter.

On May 2, 2016, the Commission issued an Order scheduling a hearing in this matter to be held on June 14, 2016. Pursuant to a subsequent Order issued on June 6,

2016, an informal conference was held on June 9, 2016, at the Commission's offices in Frankfort, Kentucky. The purpose of the informal conference was to discuss the issues in this matter and to allow the parties to engage in settlement discussions. As a result of the discussions held at the informal conference, the parties were able to negotiate a unanimous settlement agreement that is intended to resolve all the issues in the case. On June 13, 2016, LG&E filed a motion requesting leave to file testimony in support of the Settlement Agreement, Stipulation, and Recommendation ("Settlement Agreement").[1] The settlement testimony also contained, as an exhibit, the Settlement Agreement and exhibits. The Settlement Agreement is attached to this Order as an Appendix. A formal hearing was held as previously scheduled on June 14, 2016. LG&E filed responses to post-hearing data requests on June 21, 2016, and filed its post-hearing brief on June 28, 2016.

LG&E'S 2016 ENVIRONMENTAL COMPLIANCE PLAN

LG&E asserts that the projects contained in its 2016 Plan are necessary to comply with the CAA, as amended, the MATS Rule, and the CCR Rule,[2] which regulates reservoirs utilized as containment structures for coal combustion residuals ("CCR") known as ash ponds or surface impoundments. The EPA defines CCR as "fly ash, bottom ash, boiler slag, and flue gas desulfurization materials generated from burning coal for the purpose of generating electricity by electric utilities and independent power producers."[3] Compliance with the CCR Rule will, according to LG&E, require it to

---

[1] The Settlement Agreement addresses issues raised in this case as well as issues raised in 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.*

[2] Application at 1.

[3] 40 CFR 257.53.

close the ash ponds at Mill Creek and Trimble County as proposed in this proceeding. In addition, LG&E states that it has to construct process-water systems in order to address the handling of process water from continuing station operations and from the proposed impoundment closure activities. LG&E states that the proposed construction of new process-water systems must be completed in order to close the seven existing surface impoundments and to continue operations at the Mill Creek and Trimble County generating stations in compliance with its existing permits for discharging water.[4]

The total capital cost of these new pollution-control projects is estimated to be approximately $315.9 million, of which LG&E seeks to recover $313.8 million through the ECR mechanism as part of its 2016 Plan.[5] LG&E states that the proposed projects were the result of intensive assessment and ongoing engineering efforts by LG&E's Project Engineering group and outside engineering firms.[6] First, LG&E developed order-of-magnitude expenditures that would be required for each generating unit to meet the regulatory requirements.[7] Next, LG&E's Generation Planning group performed analyses to determine if all of the compliance equipment and investments would be the lowest-reasonable-cost alternatives to achieve compliance with the applicable regulations.[8] The Generation Planning group also determined for each generating unit whether it would be more cost-effective to put in place the suite of

---

[4] Application at 4.

[5] Application at 8; and Errata filing.

[6] Direct Testimony of John N. Voyles, Jr. ("Voyles Testimony") at 12–13.

[7] *Id.* at 13.

[8] *Id.*

compliance facilities established or to retire the unit.[9] According to LG&E, its 2016 Plan reflects a cost-effective means for complying with the applicable regulations.[10]

MATS Rule

LG&E's 2011 Environmental Compliance Plan included mercury-related control equipment to reduce mercury emissions at Mill Creek and Trimble County Unit 1 under the Hazardous Air Pollutants ("HAPs") Rule.[11] The MATS Rule is the final version of the HAPs Rule. The MATS Rule sets emissions limitation standards for mercury and other HAPs, reflecting levels achieved by the best-performing sources currently in operation. The supplemental technologies included in the 2016 Plan will provide operational flexibility when compared to the current use of powdered activated carbon ("PAC") injections.[12]

In June 2015, the United States Supreme Court ruled that the EPA had not appropriately considered compliance costs when issuing the final MATS Rule, reversed the prior ruling of the United States Court of Appeals for the District of Columbia Circuit ("D.C. Circuit"), and remanded the rule back to the D.C. Circuit.[13] On remand, the D.C. Circuit remanded the MATS Rule back to the EPA without vacating it. On December 1, 2015, the EPA published a proposed supplemental finding that the MATS Rule remains "necessary and appropriate" even after cost is considered, and the EPA established

---

[9] *Id.*

[10] *Id.*

[11] Direct Testimony of R. Scott Straight ("Straight Testimony") at 3.

[12] Direct Testimony of Gary H. Revlett ("Revlett Testimony") at 20.

[13] *Id.*

January 15, 2016, as the deadline for comments.[14] Because the MATS Rule was not vacated by the D.C. Circuit, it remains in full effect and compliance is compulsory.[15]

CCR Rule

On April 17, 2015, the EPA published the final version of the CCR Rule in the Federal Register, with an effective date of October 19, 2015. The self-implementing rule applies to new and existing CCR surface impoundments and landfills.[16] As LG&E explains:

> The CCR Rule establishes detailed and more stringent design, monitoring, operating, corrective action, closure, and post-closure requirements for CCR landfills and surface impoundments in order to manage environmental and safety risks associated with CCR disposal, including risks to groundwater, surface water, and ambient air, as well as to enhance the integrity of CCR impoundments.[17]

The CCR Rule sets out recordkeeping and reporting requirements for surface impoundments and distinguishes beneficial use of CCR from disposal. The new performance standards are expected to result in a move from wet to dry handling and storage of CCR.[18]

The CCR Rule applies to new surface impoundments that are designed to hold an accumulation of CCR and liquids for purposes of treatment, storage, or disposal. Inactive impoundments at active generation sites that are closed in accordance with

---

[14] *Id.* at 21.

[15] *Id.* at 20.

[16] *Id.* at 4.

[17] *Id.* at 5.

[18] *Id.*

applicable closure requirements within three years of the rule's promulgation (i.e., by April 17, 2018) are otherwise exempt from the CCR Rule.[19]

The CCR Rule requires operators of affected surface impoundments to install monitoring wells and collect a sufficient set of samples for statistical analysis no later than October 17, 2017. If the analysis shows an accumulation of CCR constituents that exceed groundwater protection standards, the owner or operator of the impoundment must cease placing CCR into the impoundment and initiate closure within six months. LG&E maintains that this single provision is a primary driver for the timing of its ash pond closure plans.[20] LG&E contends that waiting for a triggering event to precipitate the closure of the surface impoundments would jeopardize the operation of its generation fleet and the reliability of its system. LG&E asserts that complying with the CCR Rule preemptively allows it to schedule the construction in such a way as to minimize system disturbances while maintaining compliance with the CCR Rule.

Project 28

Project 28 involves the installation of supplemental mercury-related control technologies at Mill Creek Units 1–4 and Trimble County Unit 1, which, according to LG&E, will allow the use of the most cost-effective additive injections in order to mitigate mercury emissions under the MATS Rule. LG&E estimates it will cost $4.9 million to install these technologies.[21]

---

[19] *Id*. at 5–6.

[20] *Id*. at 8.

[21] Application at 6–7; and Direct Testimony of Robert M. Conroy ("Conroy Testimony") at 5.

Currently, the wet flue gas desulfurization ("WFGD") systems at Mill Creek and Trimble County use PAC injections in the process to capture mercury. A phenomenon called mercury reemission can occur from the PAC injection process that could result in excessive mercury emissions.[22] To reduce the occurrence of mercury reemission, LG&E plans to install equipment to apply additives to the coal for Mill Creek Units 1 and 2 to improve mercury oxidation in order to increase water solubility, and thus capture mercury that otherwise could be re-emitted. Project 28 also includes equipment at all Mill Creek units and Trimble County Unit 1 for injecting an organosulfide chemical additive into the WFGD reaction tanks to reduce mercury reemission.[23] These additional controls are designed to act either in combination with or as total substitute for the PAC injection.[24]

The O&M costs of Project 28 are expected to offset O&M costs associated with PAC injection currently being recovered through the environmental surcharge.[25] Project 28 would require a $4.9 million investment in equipment to store and inject the additives, but this cost would be lower than the cost of PAC.[26] LG&E also asserts that the addition of a mercury-control injection system would make CCR produced at the Mill Creek station and Trimble County Unit 1 more marketable as beneficial use products

---

[22] Conroy Testimony at 4–5.

[23] Straight Testimony at 2.

[24] Conroy Testimony at 4–5.

[25] *Id.* at 5–6.

[26] Direct Testimony of Charles R. Schram ("Schram Testimony"), Exhibit CRS-1 at 5 of 12, and Exhibit CRS-2 at 5 of 11.

because it would enable LG&E to have greater control over where the mercury is captured.[27]

LG&E's economic analysis of Project 28 shows that the total cost of the coal and WFGD additives is approximately $0.30 per megawatt hour lower than the cost of PAC.[28] LG&E contends that the savings associated with reducing the need for PAC injection more than offset the revenue requirements associated with the cost of the mercury control injection system, and that the payback period for Project 28 is one year for Trimble County Unit 1 and between one year and three years for the four units at Mill Creek.[29]

Projects 29 and 30

Projects 29 and 30 involve the closure of ash ponds and the construction of process-water systems at Mill Creek and Trimble County Unit 1, respectively. LG&E contends that these projects are necessary to comply with the CCR Rule while supporting continued operation of the generating units at those stations.[30] Specifically, LG&E proposes to complete construction activities and to close five ash ponds at Mill Creek and two ash ponds at Trimble County by 2023.[31]

While LG&E has a number of options in developing the closure plans for each of these ash ponds, LG&E notes that it seeks to balance these challenging factors: compressed compliance deadlines; optimizing existing properties at each station site;

---

[27] *Id.*

[28] *Id.*

[29] *Id.*

[30] Conroy Testimony at 7; and Voyles Testimony at 13–14.

[31] Voyles Testimony at 14.

timing of closures to support ongoing operations; and assessing how the closures can be conducted in the lowest-reasonable-cost manner to comply with the CCR Rule.[32]

Project 29 consists of the closing of five surface impoundments at Mill Creek, modifications at the gypsum processing plant, and the construction of a new process-water system for an estimated total cost of $196.9 million, $195.8 million of which will be recovered through the ECR mechanism.[33] In its economic analysis of Project 29,[34] LG&E evaluated the proposal against retiring Mill Creek in 2019 and replacing the capacity.[35] LG&E's economic analysis indicated that the present value revenue requirement for Project 29, over three gas-price scenarios, was between $225 million and $450 million lower than the retirement alternative.[36]

Project 30 at Trimble County consists of the closing of two surface impoundments and the construction of a new process-water system at an estimated total cost of $114.1 million, of which $113 million will be recovered through the ECR mechanism.[37] In its economic analysis of Project 30,[38] LG&E evaluated the following alternatives: continuing to operate Trimble County; retiring Trimble County in 2019 and

---

[32] *Id.* at 15.

[33] Application at 6; Conroy Testimony at 7; and Errata Filing.

[34] The economic analysis for Project 29 also included those costs in Project 28 that relate to Mill Creek. *See* Schram Testimony at 11.

[35] *Id.*

[36] *Id.* at 12.

[37] Conroy Testimony at 7–8; and Errata filing.

[38] The economic analysis for Project 30 also included those costs in Project 28 that relate to Trimble County. *See* Schram Testimony at 15.

replacing the capacity; and converting Trimble County to operate on natural gas.[39] Each alternative was evaluated over three gas-price scenarios: low, mid, and high.[40] LG&E's economic analysis indicated that the continued operation of Trimble County with the proposed investments associated with Project 30 was the least-cost option.[41] The present-value revenue requirement of continuing to operate Trimble County is $495 million to $2.9 billion less than the retirement/replacement alternative and $478 million to $4 billion less than the conversion alternative.[42]

SETTLEMENT AGREEMENT

As a result of the June informal conference, LG&E filed a unanimous Settlement Agreement which is characterized as addressing all matters at issue in this proceeding and representing a fair, just, and reasonable resolution of all the issues in this proceeding.

The major provisions of the Settlement Agreement applicable to LG&E are as follows:

1. For Projects 29 and 30, LG&E will amortize the non-levelized actual costs incurred over 25 years. The monthly amortization amounts to be collected through the ECR mechanism will be billed over a total of 300 expense months, beginning with and including the expense month of July 2016 and ending with and including the expense month of June 2041. LG&E will include the unamortized balance of the actual costs in its ECR rate base and will be entitled to earn and recover the full rate of return

---

[39] *Id.*

[40] *Id.* at 17.

[41] *Id.* at 17–18

[42] *Id.* at 16.

applicable to ECR rate base on all such unamortized balances. This treatment will not apply to the process-water facilities included in each project; those costs will be capitalized, depreciated, and earn a return as other ECR capital projects.

2. Base-rate roll-ins or project elimination will adjust or eliminate the ECR cost recovery of the projects but will not affect the period over which the unamortized balances will be recovered or LG&E's right to recovery of, and a full rate of return on, all such unamortized balances.

3. The depreciation rates proposed by LG&E in its application and the associated requests for approval by the Commission are withdrawn.

4. LG&E will continue its current practice of reviewing the use of the Section 199 federal tax deduction to determine whether the deduction would be available to reduce ECR revenue requirements and should be reflected in the prospective ECR rates in six-month and two-year review proceedings held before the Commission.

5. LG&E commits to continue its current practice of updating the Commission if and when material changes occur to the scope or cost of approved ECR projects in addition to the information LG&E ordinarily provides in its six-month and two-year ECR review proceedings. If LG&E determines a change sufficiently material to merit notifying the Commission occurs concerning one or more of its 2016 Plan projects, LG&E commits to notify the parties to this case within a reasonable time following LG&E's notification of the Commission. LG&E further commits to make reasonable efforts to invite the parties to this case to attend any meetings LG&E has with the Commission or Commission Staff for providing updates concerning any 2016 Plan updates.

6. The parties to this case agree that, except as modified by the Settlement Agreement and the exhibits attached thereof, all the relief requested in LG&E's application in this proceeding, as corrected by LG&E's errata and other filings, should be approved as filed, including without limitation the following:

a. Granting LG&E CPCNs to conduct federal CCR Rule compliance construction and construct new process-water systems at Trimble County and Mill Creek (Projects 29 and 30);

b. Except as modified by the Settlement Agreement, approving LG&E's 2016 Plan for purposes of recovering its costs through its ECR mechanism as proposed in its application in this proceeding, including the requested 10 percent return on equity as approved by the Commission's Final Order dated June 30, 2015, in Case No. 2014-00372;[43]

c. Approving LG&E's ECR tariff provisions for recovery of costs of LG&E's 2016 Plan effective for bills rendered on and after August 31, 2016 (i.e., beginning with the expense month of July 2016); and

d. Approving LG&E's proposed environmental surcharge ("ES") monthly filing forms as filed, except as modified by the Settlement Agreement in Exhibit 2, which accounts for the non-levelized amortization approach.

LEGAL STANDARDS

CPCN

The Commission's standard of review regarding a CPCN is well settled. No utility may construct or acquire any facility to be used in providing utility service to the

[43] Case No. 2014-00372, *Application of Louisville Gas and Electric Company for an Adjustment of Its Electric and Gas Rates* (Ky. PSC June 30, 2015).

public until it has obtained a CPCN from this Commission.[44] To obtain a CPCN, the utility must demonstrate a need for such facilities and an absence of wasteful duplication.[45]

> "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.[46]

"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."[47] 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.[48] Selection of a proposal that ultimately costs more than an alternative does not necessarily result in

---

[44] KRS 278.020(1).

[45] *Kentucky Utilities Co. v. Pub. Serv. Comm'n*, 252 S.W.2d 885 (Ky. 1952).

[46] *Id*. at 890.

[47] *Id*.

[48] 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.[49] All relevant factors must be balanced.[50] The statutory touchstone for ratemaking in Kentucky is the requirement that rates set by the Commission must be fair, just, and reasonable.[51]

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 which is an alternative to the filing of 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

---

[49] *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).

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

[51] KRS 278.190(3).

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 LG&E has sufficiently established a need for the proposed projects contained in its 2016 Plan in order to achieve compliance with the CAA, as amended, the MATS Rule, and the CCR Rule. The Commission also finds that the proposed projects contained in LG&E's 2016 Plan are the lowest-reasonable-cost alternatives to achieve compliance with the relevant environmental statute and regulations. The Commission notes that LG&E's economic analyses of the individual projects in the company's 2016 Plan contain reasonable assumptions and alternatives, and are based on appropriate methodologies. We further note that LG&E'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 LG&E's 2016 Plan as amended to recover the costs of the pollution-control construction through its ECR Surcharge tariff is reasonable.

Therefore, the Commission concludes that the installation of supplemental mercury-related control technologies, which allows the use of the most-cost-effective additive injections in order to mitigate mercury emissions, the impoundment-related closure construction, and the construction of new process-water systems are required under applicable environmental regulations in order to assure meeting those regulations, and that the proposed environmental compliance construction projects are the least-cost reasonable solution in meeting those requirements.

Accordingly, the Commission finds that, except for the provision discussed below, the remaining provisions of the Settlement Agreement and its attached exhibits are reasonable and should be accepted on matters of the accounting treatment, timing, and recovery of costs involved in the proposed environmental compliance projects of the case. The Commission, however, based on the analysis that follows, finds that the provision concerning the 10 percent return on equity ("ROE") is not reasonable and this provision should therefore be modified.

Return on Equity

Article IV of the Settlement Agreement provides for LG&E's 2016 Plan to earn the 10 percent ROE as approved by the Commission on June 30, 2015, for use in ECR billings in Case No. 2014-00372.[52] Although the Commission found a 10 percent ROE

[52] Case No. 2014-00372, *Application of Louisville Gas and Electric Company for an Adjustment of Its Electric and Gas Rates* (Ky. PSC June 30, 2015).

to be reasonable in Case No. 2015-00412[53] for calculating LG&E's ECR charges for its 2011 Environmental Compliance Plan, the Commission is not bound by that previous approval in setting a reasonable ROE for the 2016 Plan investment. As stated on page 10 of LG&E's and Kentucky Utilities Company's ("KU") (jointly "the Companies") Post-Hearing Brief ("Brief"), the Commission "must exercise its own judgment in evaluating the evidence and law in these proceedings."

The controlling statute, KRS 278.183(2)(b), provides that when a new environmental compliance plan is filed, the Commission must "[e]stablish a reasonable return on compliance-related capital expenditures." In light of the sustained downward trend in electric utility ROE awards as exhibited by the Regulatory Research Associates ("RRA") reports introduced at the public hearing in this matter,[54] the Commission finds a 10 percent ROE to be at an unnecessarily high level to compensate investors for the risk in investing in the Companies and their new ECR projects on an ongoing basis.

The 10 percent ROE was found to be reasonable by the Commission in June 2015 in Case No. 2014-00372 based on a substantial record, which included expert testimony filed by LG&E and the intervening parties over the six-month period of November 2014 through April 2015. Since that time, capital markets changed sufficiently for the Commission to have approved a 9.7 percent ROE for the Accelerated Service Line Replacement Program ("ASRP") of Duke Energy Kentucky, Inc. ("Duke

[53] Case No. 2015-00412, *An Examination by the Public Service Commission of the Environmental Surcharge Mechanism of Louisville Gas and Electric Company for the Six-Month Billing Period Ending October 31, 2015* (Ky. PSC Mar. 16, 2016).

[54] PSC – Exhibits 3–6.

Kentucky") in Case No. 2015-00210.[55] The Commission notes that in that proceeding, it was the request of Duke Kentucky to use its most recent Commission approved ROE of 10.375 percent from Duke Kentucky's 2009 gas rate case to calculate the return on its proposed ASRP.[56] As a result of a settlement by Duke Kentucky and the AG in that case, the Commission approved as reasonable a 9.7 percent ROE in February 2016.

The Companies' testimony did not include an analysis of current economic conditions, nor did it address any of the traditional ROE methodologies, such as Discounted Cash Flow, Capital Asset Pricing Model, Risk Premium, or Comparable Earnings. As stated numerous times in their Brief, the 10 percent ROE was approved by the Commission relatively recently in June 2015. However, over 12 months have passed since that time and, as noted above, the Environmental Surcharge Statute requires the Commission to establish a reasonable return on environmental expenditures. In approving a 10 percent ROE in June 2015 in LG&E's last rate case, the Commission was unaware that a new environmental compliance plan would be filed in 2016. Thus, the Commission finds it appropriate in this case to consider the RRA reports that were included in the record and described by the Companies' Brief, at page 29, in determining the ROE to now be authorized as reasonable considering the ROE expected by investors for the investment of new capital and the nature of the rate recovery under the Environmental Surcharge Statute.

---

[55] Case No. 2015-00210, *Application of Duke Energy Kentucky, Inc. for a Certificate of Public Convenience and Necessity Authorizing the Implementation of an Accelerated Service Line Replacement Program, Approval of Ownership of Service Lines, and a Gas Pipeline Replacement Surcharge* (Ky. PSC Feb. 2, 2016).

[56] *See* Case No. 2009-00202, *Application of Duke Energy Kentucky, Inc. for an Adjustment of Rates* (Ky. PSC Dec. 29, 2009).

The Companies described in their Brief the documents introduced by Staff at the public hearing, and explained why they believe it is inappropriate to rely on ROE awards by Commissions in other jurisdictions in cases involving electric utilities. The Commission has stated in previous Orders that we do not rely on individual returns awarded in other states in determining the appropriate ROE for Kentucky jurisdictional utilities. However, we have also stated that we find it reasonable to expect that other state commissions, each with its own attributes, are evaluating expert witness testimony which uses the same or similar cost-of-equity models as those presented by parties participating in Kentucky rate proceedings, and reaching conclusions based on the data provided in the records of individual cases. Here, no cost-of-equity models were presented by any party and, thus, we find it reasonable to consider the ROEs as reported by RRA as indicative of current economic market indicators for ROE.

The RRA reports are not exhaustive in terms of presenting complete information concerning all utility rate case decisions, as pointed out in the Companies' Brief. The reports do, however, summarize the conclusions reached by other commissions, as well as this Commission, as to reasonable ROEs, and contain explanatory reference points as to individual circumstances, all of which are available to investors. To the extent that investors' expectations are influenced by such publications, and we believe they are, we also find it appropriate to use that information to put their expectations in context.

While we do not rely on the specific ROE awards summarized by the RRA reports, we take note of the simple fact that average annual ROE awards by state public service commissions have been steadily declining since 2009, as shown on page 3 of the Major Rate Case Decisions—Calendar 2015 report entered into the record by Staff

at the hearing. Whether Virginia State Corporate Commission ("VSCC") awards are included or not, the average ROE authorized electric utilities in 2015 was lower than that for 2014, and the average annual awards for both years were below 10 percent (9.85 percent in 2015 compared to 9.91 in 2014, including VSCC awards reflecting statutorily mandated ROE premiums; and 9.58 percent in 2015 excluding VSCC awards, down from 9.76 percent in 2014).[57]

The RRA Major Rate Case Decisions – January – March 2016 report provided by Staff at the hearing shows that in the first quarter of 2016, the inclusion of VSCC awards caused the average ROE for electric utilities to increase to 10.26 percent. Excluding those awards, however, the average first quarter ROE award is 9.68 percent. The Companies point out that the 9.85 percent ROE award for Indianapolis Power and Light Company ("IPL"), which is contained in the January – March 2016 report, was actually reduced by the Indiana Utility Regulatory Commission from 10 percent due to mismanagement. The Commission notes that increasing IPL's ROE from 9.85 to 10 percent in the first quarter 2016 ROE results would produce a first quarter average ROE of 9.75 percent, excluding VSCC awards.

The Commission is relying on the RRA information discussed above for two conclusions regarding a reasonable ROE award for LG&E's 2016 Plan in this proceeding. First, when statutory ROE premiums that are awarded to some utilities in Virginia are excluded, as investors would be able to do with the information provided, there is a clear trend of average ROE awards below 10 percent. Second, despite quarterly averages that occasionally are higher than those for the directly preceding

[57] Virginia statutes authorize the State Corporation Commission to approve additional ROE basis points for certain generation projects.

quarter, the annual trend has been for decreasing ROE awards. Page 3 of the January – March 2016 report shows quarterly averages through 2016. Taking simple 12-month averages of quarterly ROE awards for the 12 months ended March 31 each year shows that 12-month averages were approximately 10 percent at March 31 of 2013 and 2014, and then decline to 9.96 percent for the 12 months ended March 2015 and to 9.75 percent for the 12 months ended March 2016. These averages reflect all awards reported, including Virginia. The Commission agrees with the Companies that these averages are composed of a range of ROE awards, some of which are 10 percent or more. The Commission does not agree, in light of the trends represented by this information, that it should now approve a 10 percent ROE as was granted in a utility's last rate because it has been our tradition or usual practice, or out of a sense of expediency. Doing so would be contrary to the mandate under the Environmental Surcharge Statute to establish a reasonable return on compliance expenditures.

In spite of the Companies' numerous references to the Commission's long-standing practice of using a utility's last base rate case ROE in establishing reasonable ECR cost pursuant to KRS 278.183, the Response to Information Requested at Hearing Held on June 14, 2016, Item 2, is evidence that the Commission has not exclusively used the last base rate case ROE for that purpose. The response to Item 2 provides a chart showing the 10.10 percent ROE found by the Commission to be reasonable for 2011 environmental compliance plans. The ROEs established by the settlement in Case No. 2011-00162[58] were 10.63 percent for projects and items in the 2009, 2006,

[58] Case No. 2011-00162, *Application of Louisville Gas and Electric 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), Final Order.

and 2005 environmental compliance plans, as established in a previous base rate case proceeding, and 10.10 percent for projects and items in the 2011 environmental compliance plans, *unless prospectively changed by a future Commission Order*.[59] The 10.10 percent to which the parties agreed and the Commission approved was established through the process of discovery, after the filing of expert testimony regarding ROE. The italicized language in the Commission's Order sends the clear message that the Commission may not always choose to rely on ROEs established in previous proceedings in exercising its judgment as to reasonable cost for new ECR plans pursuant to KRS 278.183.

Irrespective of the agreement by the parties that a 10 percent ROE is appropriate for the 2016 Plan, the Commission finds no basis to continue the use of that ROE for monthly automatic cost recovery under that plan, particularly considering the economic climate now facing Kentucky ratepayers. For purposes of setting an ROE for the 2016 Plan, it is not necessary to establish an upper and lower range of reasonableness. The only requirement is to set a specific ROE which is largely guaranteed, by the operation of the ECR mechanism, through the recovery of environmental compliance costs and investments with practically no regulatory lag. The Commission takes note of the Duke Energy ASRP ROE approved in February of this year, as well as the previously mentioned trends in electric utility ROE awards since LG&E filed its application and the Commission issued its final order in Case No. 2014-00372.

After weighing all the evidence of record, including that presented at the hearing, the Commission finds LG&E's required ROE for purposes of the 2016 ECR and related

[59] *Id.* Final Order at 12. [Emphasis added.]

monthly surcharge filings to be 9.8 percent. Despite the Commission's finding that a reasonable ROE is one that is lower than the 10 percent to which the parties agreed, this should not be considered as a discount to account for the diminished risk of cost disallowance, as the Companies' Brief theorizes,[60] nor as a ROE reduction due to mismanagement,[61] and it is not intended to, nor can it, be punitive.[62] The Commission's finding as to a reasonable ROE is simply a reflection of current economic conditions, investor expectations, and our statutory duty under KRS 278.183(2)(b).

In summary, based on its review of the provisions of the Settlement Agreement and the exhibits attached thereto and the record in this proceeding, including intervenor testimony, data responses, and information presented at the public hearing, the Commission finds that the provisions of the Settlement Agreement are in the public interest and should be approved with two exceptions. These exceptions are the ROE to be used in LG&E's 2016 Plan and monthly ECR filings for that plan, as discussed above, and KU's request for a declaratory order as addressed in Case No. 2016-00026.[63] We note that the Settlement Agreement is the product of arm's-length negotiations among knowledgeable, capable parties. Approval of the Settlement Agreement, except for the ROE and KU's request for a declaratory order as addressed in Case No. 2016-00026, is based solely on the reasonableness of the other provisions in total and does not constitute precedent on any of those other issues except as specifically provided for therein.

---

[60] Brief at 32.

[61] *Id*. at 27–28.

[62] *Id*. at 28, fn 83.

[63] Case No. 2016-00026, *Kentucky Utilities Company* (Ky. PSC Aug. 8, 2016), Final Order at 25–26.

IT IS THEREFORE ORDERED that:

1. LG&E is granted a CPCN for Project 29 which consists of the closure of five surface impoundments and construction of a process-water system at Mill Creek as described in LG&E's application.

2. LG&E is granted a CPCN for Project 30 which consists of the closure of two surface impoundments and construction of a process-water system at Trimble County as described in LG&E's application.

3. LG&E's 2016 Plan, consisting of Projects 28, 29, and 30, is approved.

4. The proposed revisions and additions to LG&E's monthly ES forms are approved as modified by the Settlement Agreement with the effective date of the revisions approved as requested.

5. LG&E shall use a 9.8 percent ROE in the ECR mechanism for the 2016 Plan.

6. All provisions of the Settlement Agreement, attached hereto and incorporated herein as the Appendix, except as set forth in ordering paragraph 5 and KU's request for a declaratory order as addressed in Case No. 2016-00026, are approved.

7. Within ten days of the date of this Order, LG&E 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.

8. LG&E 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.

9. LG&E shall submit status update reports on the construction and implementation of the proposed projects contained in its 2016 Plan every three months from the date of this Order. 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 for each of the projects contained in the 2016 Plan, construction activities that occurred during the reporting period, and the construction activities for the next reporting period.

10. Any documents filed in the future pursuant to ordering paragraphs 8 and 9 herein shall reference this case number and shall be retained in the utility's general correspondence files.

11. The Executive Director is delegated authority to grant reasonable extension of time for the filing of any documents required by ordering paragraph 9 of this Order upon LG&E's showing of good cause.

By the Commission

ENTERED
AUG 0 8 2016
KENTUCKY PUBLIC
SERVICE COMMISSION

ATTEST:

Executive Director

APPENDIX

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2016-00027 DATED AUG 08 2016

SETTLEMENT AGREEMENT, STIPULATION AND RECOMMENDATION

This Settlement Agreement, Stipulation, and Recommendation ("Settlement Agreement") is entered into this 13th day of June 2016 by and between Kentucky Utilities Company ("KU") and Louisville Gas and Electric Company ("LG&E") (collectively, "the Utilities"); Attorney General of the Commonwealth of Kentucky, by and through the Office of Rate Intervention ("AG"); and Kentucky Industrial Utility Customers, Inc. ("KIUC") (collectively, "Parties").

WITNESSETH:

WHEREAS, on January 29, 2016, KU filed with the Kentucky Public Service Commission ("Commission") its Application *In the Matter of: 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*, and the Commission has established Case No. 2016-00026;

WHEREAS, on January 29, 2016, LG&E filed with the Commission its Application *In the Matter of: The Application of Louisville Gas and Electric Company for Certificates of Public Convenience and Necessity and Approval of Its 2016 Compliance Plan for Recovery by Environmental Surcharge*, and the Commission has established Case No. 2016-00027 (Case Nos. 2016-00026 and 2016-00027 are hereafter collectively referenced as the "ECR Proceedings");

WHEREAS, on February 5, 2016, the Commission Staff issued deficiency letters to the Companies concerning their applications in the ECR Proceedings, which deficiencies the Companies cured on February 9, 2016, as reflected by a letter in each of the ECR Proceedings from the Commission Staff dated February 16, 2009;

WHEREAS, the Commission has granted full intervention in the ECR Proceedings to the AG and KIUC;

WHEREAS, a prehearing informal conference for the purpose of discussing settlement, attended by representatives of the Parties and the Commission Staff took place on June 9, 2016, at the offices of the Commission, during which a number of procedural and substantive issues were discussed, including potential settlement of all issues pending before the Commission in the ECR Proceedings;

WHEREAS, all of the Parties hereto unanimously desire to settle all the issues pending before the Commission in the ECR Proceedings;

WHEREAS, the adoption of this Settlement Agreement as a fair, just, and reasonable disposition of the issues in this case will eliminate the need for the Commission and the Parties to expend significant resources litigating these ECR Proceedings, and eliminate the possibility of, and any need for, rehearing or appeals of the Commission's final orders herein;

WHEREAS, it is understood by all Parties hereto that this Settlement Agreement is subject to the approval of the Commission, insofar as it constitutes an agreement by all Parties to the ECR Proceedings for settlement;

WHEREAS, all of the Parties, who represent diverse interests and divergent viewpoints, agree that this Settlement Agreement, viewed in its entirety, is a fair, just, and reasonable resolution of all the issues in the ECR Proceedings; and

WHEREAS, the Parties believe sufficient and adequate data and information support this Settlement Agreement, and further believe the Commission should approve it;

NOW, THEREFORE, for and in consideration of the promises and conditions set forth herein, the Parties hereby stipulate and agree as follows:

ARTICLE I. AMORTIZATION OF SURFACE-IMPOUNDMENT-CLOSURE COSTS

1.1. Concerning the Utilities' amended compliance plan for purposes of recovering the costs of new pollution control facilities through their respective Environmental Cost Recovery ("ECR") Surcharge tariff provisions ("2016 ECR Plans"), for KU Projects 40, 41, and 42 and LG&E Projects 29 and 30, each Utility will amortize on a non-levelized basis over 25 years the actual surface-impoundment-closure costs incurred and CCR Rule compliance costs incurred (including groundwater monitoring costs) of each project; such costs will not include costs related to the process-water facilities included in each project. The monthly amortization amounts to be collected through each Utility's ECR mechanism will be billed over a total of 300 expense months beginning with and including the expense month of July 2016 and ending with and including the expense month of June 2041. Each Utility will include the unamortized balance of such actual costs in its ECR rate base and will be entitled to earn and recover the full rate of return applicable to ECR rate base on all such unamortized balances.

1.2. For KU Project 39, KU will amortize on a non-levelized basis over 10 years the actually incurred costs of the project, with monthly amortization amounts to be collected through KU's ECR mechanism for a total of 120 expense months beginning with and including the expense month of July 2016 and ending with and including the expense month of June 2026. KU will include the unamortized balance of such actual costs in its ECR rate base and will be entitled to earn and recover the full rate of return applicable to ECR rate base on the unamortized balance.

1.3. As with all ECR projects, ECR cost recovery as described in Paragraphs 1.1 and 1.2 above will be adjusted or eliminated to account for base-rate roll-ins or project elimination; however, no ECR base-rate roll-in or project elimination will affect the period over which the

unamortized balances will be recovered or the Utilities' right to recovery of, and a full rate of return on, all such unamortized balances.

1.4. The depreciation rates proposed by the Utilities in their applications and the associated requests for approval by the Commission are withdrawn.

ARTICLE II. SECTION 199 TAX DEDUCTION

2.1. The Utilities will continue their current practice concerning the Section 199 federal tax deduction by reviewing the use of the deduction and determining whether the deduction would be available to reduce ECR revenue requirements and should be reflected in prospective ECR rates in six-month and two-year ECR review proceedings held before the Commission. Nothing in this provision is intended to bind any of the Parties or the Commission concerning any position they might take concerning the Section 199 deduction in any of the Utilities' six-month or two-year ECR review proceedings.

ARTICLE III. REPORTING TO THE COMMISSION CONCERNING THE UTILITIES' 2016 ECR PLANS

3.1. The Utilities commit to continue their current practice of updating the Commission if and when material changes occur to the scope or cost of approved ECR projects in addition to the information the Utilities ordinarily provide in their six-month and two-year ECR review proceedings. If the Utilities determine a change sufficiently material to merit notifying the Commission occurs concerning one or more of their respective 2016 ECR Plan projects, the Utilities commit to notify the Parties within a reasonable time following the Utilities' notification of the Commission. The Utilities further commit to make reasonable efforts to invite the Parties to attend any meetings the Utilities have with the Commission or Commission Staff for providing updates concerning any 2016 ECR Plan projects.

ARTICLE IV. ALL OTHER RELIEF TO BE GRANTED AS REQUESTED IN THE UTILITIES' APPLICATIONS

4.1. The Parties agree that, except as modified in this Settlement Agreement and the exhibits attached hereto, all of the relief requested in the Utilities' filings in the ECR Proceedings (as corrected by the Utilities' errata and other filings in the ECR Proceedings) should be approved as filed, including without limitation the following:

(A) Granting KU a certificate of public convenience and necessity ("CPCN") to construct Phase II of the Brown landfill;

(B) A declaration that no CPCN is required for any portion of KU Project 39 (surface-impoundment closures at the Green River, Pineville, and Tyrone Generating Stations);

(C) Granting the Utilities CPCNs to conduct federal Coal Combustion Residuals ("CCR") Rule compliance construction and construct new process water systems at the Ghent, E.W. Brown, Trimble County, and Mill Creek Generating Stations (KU Projects 40, 41, and 42 and LG&E Projects 29 and 30);

(D) Except as modified by this Settlement Agreement in Article I, approving the Utilities' 2016 ECR Plans for purposes of recovering their costs through the Utilities' respective ECR mechanisms as proposed in the Utilities' applications in the ECR proceedings, including the Utilities' requested 10.00% return on equity as approved by the Commission for use in the Utilities' ECR billings in the Commission's final orders dated June 30, 2015, in Case Nos. 2014-00371 and 2014-00372;

(E) Approving the Utilities' respective ECR tariff provisions for recovery of the costs of the Utilities' 2016 ECR Plans effective for bills rendered on and after August 31, 2016 (i.e., beginning with the expense month of July 2016); and

(F) Approving the Utilities' proposed environmental surcharge ("ES") monthly filing forms as filed, except as modified by this Settlement Agreement in Exhibit 1 (KU's revised ES Forms 2.00 and 2.10) and Exhibit 2 (LG&E's revised ES Forms 2.00 and 2.10), which account for the non-levelized amortization approach addressed in Article I of this Settlement Agreement.

ARTICLE V. MISCELLANEOUS PROVISIONS

5.1. Except as specifically stated otherwise in this Settlement Agreement, entering into this Settlement Agreement shall not be deemed in any respect to constitute an admission by any of the Parties that any computation, formula, allegation, assertion or contention made by any other party in these ECR Proceedings is true or valid.

5.2. The Parties hereto agree that the foregoing stipulations and agreements represent a fair, just, and reasonable resolution of the issues addressed herein and request the Commission to approve the Settlement Agreement.

5.3. Following the execution of this Settlement Agreement, the Parties shall cause the Settlement Agreement to be filed with the Commission on or about June 14, 2016, together with a request to the Commission for consideration and approval of this Settlement Agreement effective for bills rendered on and after August 31, 2016 (i.e., beginning with the expense month of July 2016) by issuing an order on or before July 29, 2016.

5.4. Each of the Parties waives all cross-examination of the other Parties' witnesses unless the Commission disapproves this Settlement Agreement, and each party further stipulates and recommends that the Notice of Intent, Notice, Application, testimony, pleadings, and responses to data requests filed in the ECR Proceedings be admitted into the record. The Parties stipulate that after the date of this Settlement Agreement they will not otherwise contest the

Utilities' proposals, as modified by this Settlement Agreement, in the hearing of the ECR Proceedings regarding the subject matter of the Settlement Agreement, and that they will refrain from cross-examination of the Utilities' witnesses during the hearing, except insofar as such cross-examination is in support of the Settlement Agreement.

5.5. This Settlement Agreement is subject to the acceptance of, and approval by, the Commission. The Parties agree to act in good faith and to use their best efforts to recommend to the Commission that this Settlement Agreement be accepted and approved.

5.6. If the Commission issues an order adopting this Settlement Agreement in its entirety and without additional conditions, each of the Parties agrees that it shall file neither an application for rehearing with the Commission, nor an appeal to the Franklin Circuit Court with respect to such order.

5.7. If the Commission does not accept and approve this Settlement Agreement in its entirety, then: (a) any or all of the Parties may withdraw from this Settlement Agreement, and any withdrawing Party shall not be bound by any of the provisions herein, though any such withdrawals shall not preclude any or all of the Parties from advocating any position contained in this Settlement Agreement; (b) any of the Parties may request a hearing on any or all of the issues in the ECR Proceedings; and (c) neither the terms of this Settlement Agreement nor any matters raised during the settlement negotiations shall be binding on any withdrawing Party or be construed against any withdrawing Party.

5.8. All Parties agree to keep confidential all communications among any of the Parties concerning this Settlement Agreement, including without limitation all communications related to negotiating this Settlement Agreement. This provision will survive any withdrawal from this Settlement Agreement pursuant to Article 5.7 above or any action by the Commission,

and will be binding upon all Parties, including any Parties withdrawing from this Settlement Agreement.

5.9. If the Settlement Agreement is voided or vacated for any reason after the Commission has approved the Settlement Agreement, none of the Parties will be bound by the Settlement Agreement except as stated in Article 5.8 above.

5.10. The Settlement Agreement shall in no way be deemed to divest the Commission of jurisdiction under Chapter 278 of the Kentucky Revised Statutes.

5.11. The Settlement Agreement shall inure to the benefit of and be binding upon the Parties hereto and their successors and assigns.

5.12. The Settlement Agreement constitutes the complete agreement and understanding among the Parties, and any and all oral statements, representations or agreements made prior hereto or contained contemporaneously herewith shall be null and void and shall be deemed to have been merged into the Settlement Agreement.

5.13. The Parties hereto agree that, for the purpose of the Settlement Agreement only, the terms are based upon the independent analysis of the Parties to reflect a fair, just, and reasonable resolution of the issues herein and are the product of compromise and negotiation.

5.14. The Parties hereto agree that neither the Settlement Agreement nor any of the terms shall be admissible in any court or commission except insofar as such court or commission is addressing litigation arising out of the implementation of the terms herein or the approval of this Settlement Agreement. This Settlement Agreement shall not have any precedential value in this or any other jurisdiction.

5.15. The signatories hereto warrant that they have appropriately informed, advised, and consulted their respective Parties in regard to the contents and significance of this Settlement

Agreement and based upon the foregoing are authorized to execute this Settlement Agreement on behalf of their respective Parties.

5.16. The Parties hereto agree that this Settlement Agreement is a product of negotiation among all Parties hereto, and no provision of this Settlement Agreement shall be strictly construed in favor of or against any party. Notwithstanding anything contained in the Settlement Agreement, the Parties recognize and agree that the effects, if any, of any future events upon the operating income of the Utilities are unknown and this Settlement Agreement shall be implemented as written.

5.17. The Parties hereto agree that this Settlement Agreement may be executed in multiple counterparts.

IN WITNESS WHEREOF, the Parties have hereunto affixed their signatures.

Kentucky Utilities Company and
Louisville Gas and Electric Company

By: _____
Kendrick R. Riggs

By: _____
Allyson K. Sturgeon

Attorney General for the Commonwealth of Kentucky, by and through the Office of Rate Intervention

HAVE SEEN AND AGREED:

By:_____
Lawrence W. Cook
Rebecca W. Goodman

Kentucky Industrial Utility Customers, Inc.

HAVE SEEN AND AGREED:

By: _____

Michael L. Kurtz
Kurt J. Boehm
Jody M. Kyler Cohn

400001.152778/1351196.8

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT

Revenue Requirements of Environmental Compliance Costs
For the Expense Month of

Determination of Environmental Compliance Rate Base

	Enviromental Compliance Plan
Eligible Pollution Control Plant	
Eligible Pollution CWIP Excluding AFUDC	
Subtotal	
Additions:	
Inventory - Emission Allowances per ES Forms 2.31, 2.32, 2.33 and 2.34	
Less: Allowance Inventory Baseline	
Net Emission Allowance Inventory	
Cash Working Capital Allowance	
Net Unamortized Closure Cost Balance - Active Stations	
Net Unamortized Closure Cost Balance - Retired Stations	
Subtotal	
Deductions:	
Accumulated Depreciation on Eligible Pollution Control Plant	
Pollution Control Deferred Income Taxes	
Pollution Control Deferred Investment Tax Credit	
Subtotal	
Environmental Compliance Rate Base	

Determination of Pollution Control Operating Expenses

	Enviromental Compliance Plan
Monthly Operations & Maintenance Expense	
Monthly Depreciation & Amortization Expense	
Monthly Taxes Other Than Income Taxes - Eligible Plant	
Monthly Taxes Other Than Income Taxes - Closure Costs	
Amortization of Monthly Closure Costs - Active Stations	
Amortization of Monthly Closure Costs - Retired Stations	
Monthly Emission Allowance Expense from ES Forms 2.31, 2.32, 2.33 amd 2.34	
Add KU Current Month TC2 Emission Allowance Expense reported on ES Form 2.31, 2.32, 2.33 and 2.34	
Less Monthly Emission Allowance Expense in base rates	
Net Recoverable Emission Allowance Expense	
Monthly Surcharge Consultant Fee	
Construction Monitoring Consultant Fee	
Total Pollution Control Operations Expense	

Determination of Beneficial Reuse Operating Expenses

	Environmental Compliance Plan
Total Monthly Beneficial Reuse Expense	
Adjustment for Beneficial Reuse in Base Rates (from ES Form 2.61)	
Net Beneficial Reuse Operations Expense	

Proceeds From By-Product and Allowance Sales

	Total Proceeds	Amount in Base Rates	Net Proceeds
	(1)	(2)	(1) - (2)
Allowance Sales			
Scrubber By-Products Sales			
Total Proceeds from Sales			

ES FORM 2.10

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT
Plant, CWIP & Depreciation Expense

For the Month Ended:

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Description	Eligible Plant In Service	Eligible Accumulated Depreciation	CWIP Amount Excluding AFUDC	Eligible Net Plant In Service	Unamortized ITC as of	Deferred Tax Balance as of	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)+(4)				
2009 Plan: Project 28 - Brown 3 SCR Project 29 - ATB Expansion at E.W. Brown Station (Phase II) Project 30 - Ghent CCP Storage (Landfill- Phase I) Project 31 - Trimble County Ash Treatment Basin (BAP/GSP) Project 32 - Trimble County CCP Storage (Landfill - Phase I) Project 33 - Beneficial Reuse								
Subtotal Less Retirements and Replacement resulting from implementation of 2009 Plan								
Net Total - 2009 Plan:								
2011 Plan: Project 29 - Brown Landfill (Phase I) Project 34 - E.W. Brown Station Air Compliance Project 35 - Ghent Station Air Compliance								
Subtotal Less Retirements and Replacement resulting from implementation of 2011 Plan								
Net Total - 2011 Plan:								
2016 Plan: Project 36 - Brown Landfill (Phase II) Project 37 - Ghent 2 WFGD Improvements Project 38 - Supplemental Mercury Control Project 40 - Ghent New Process Water Systems Project 41 - Trimble County New Process Water Systems Project 42 - Brown New Process Water Systems								
Subtotal Less Retirements and Replacement resulting from implementation of 2016 Plan								
Net Total - 2016 Plan:								
Net Total - All Plans:								

Note 1: Trimble County projects for the 2009 Plan are proportionately shared by KU at 48% and LG&E at 52%
Note 2: Project 29 as approved in the 2009 ECR Plan recovers costs associated with the Brown Aux Pond (Phase II). In the 2011 Plan, Project 29 was amended to recover costs associated with the conversion of the Brown Main Ash Pond to the Brown Landfill (Phase I)

ES FORM 2.00

LOUISVILLE GAS AND ELECTRIC COMPANY
ENVIRONMENTAL SURCHARGE REPORT

Revenue Requirements of Environmental Compliance Costs
For the Expense Month of

Determination of Environmental Compliance Rate Base

	Enviromental Compliance Plan	
Eligible Pollution Control Plant		
Eligible Pollution CWIP Excluding AFUDC		
Subtotal		
Additions:		
Inventory - Emission Allowances per ES Forms 2.31, 2.32, 2.33 and 2.34		
Cash Working Capital Allowance		
Net Unamortized Closure Cost Balance		
Subtotal		
Deductions:		
Accumulated Depreciation on Eligible Pollution Control Plant		
Pollution Control Deferred Income Taxes		
Subtotal		
Environmental Compliance Rate Base		

Determination of Pollution Control Operating Expenses

	Environmental Compliance Plan
Monthly Operations & Maintenance Expense	
Monthly Depreciation & Amortization Expense	
less investment tax credit amortization	
Monthly Taxes Other Than Income Taxes - Eligible Plant	
Monthly Taxes Other Than Income Taxes - Closure Costs	
Amortization of Monthly Closure Costs	
Monthly Emission Allowance Expense from ES Forms 2.31, 2.32, 2.33 amd 2.34	
Monthly Surcharge Consulting Fees	
Construction Monitoring Consultant Fee	
Total Pollution Control Operations Expense	

Determination of Beneficial Reuse Operating Expenses

	Environmental Compliance Plan
Total Monthly Beneficial Reuse Expense	
Adjustment for Beneficial Reuse in Base Rates (from ES Form 2.61)	
Net Beneficial Reuse Operations Expense	

Proceeds From By-Product and Allowance Sales

	Total Proceeds	Amount in Base Rates	Net Proceeds
	(1)	(2)	(1) - (2)
Allowance Sales			
Scrubber By-Products Sales			
Total Proceeds from Sales			

ES FORM 2.10

LOUISVILLE GAS AND ELECTRIC COMPANY
ENVIRONMENTAL SURCHARGE REPORT
Plant, CWIP & Depreciation Expense

For the Month Ended:

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Description	Eligible Plant In Service	Eligible Accumulated Depreciation	CWIP Amount Excluding AFUDC	Eligible Net Plant In Service	Deferred Tax Balance as of	Monthly ITC Amortization Credit	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)+(4)				
2009 Plan:								
Project 22 - Cane Run CCP Storage (Landfill - Phase I) [CANCELLED]								
Project 23 - Trimble County Ash Treatment Basin (BAP/GSP)								
Project 24 - Trimble County CCP Storage (Landfill - Phase 1)								
Project 25 - Beneficial Reuse								
Subtotal								
Less Retirements and Replacement resulting from implementation of 2009 Plan								
Net Total - 2009 Plan:								
2011 Plan:								
Project 26 - Mill Creek Station Air Compliance								
Project 27 - Trimble County Unit 1 Air Compliance								
Subtotal								
Less Retirements and Replacement resulting from implementation of 2011 Plan								
Net Total - 2011 Plan:								
2016 Plan:								
Project 28 - Supplemental Mercury Control								
Project 29 - Mill Creek New Process Water Systems								
Project 30 - Trimble County New Process Water Systems								
Subtotal								
Less Retirements and Replacement resulting from implementation of 2016 Plan								
Net Total - 2016 Plan:								
Net Total - All Plans:								

Note 1: Trimble County projects for the 2009 Plan are proportionately shared by KU at 48% and LG&E at 52%.
Note 2: Effective with the September 2012 expense month, Project 22 is cancelled and the previous CWIP balance is included on ES Form 2.50 as an expense for the September 2012 expense month.

*Honorable Allyson K Sturgeon
Senior Corporate Attorney
LG&E and KU Energy LLC
220 West Main Street
Louisville, KENTUCKY 40202

*Larry Cook
Assistant Attorney General
Office of the Attorney General Utility & Rate
1024 Capital Center Drive
Suite 200
Frankfort, KENTUCKY 40601-8204

*Derek Rahn
LG&E and KU Energy LLC
220 West Main Street
Louisville, KENTUCKY 40202

*Honorable Michael L Kurtz
Attorney at Law
Boehm, Kurtz & Lowry
36 East Seventh Street
Suite 1510
Cincinnati, OHIO 45202

*Honorable W. Duncan Crosby III
Attorney at Law
Stoll Keenon Ogden, PLLC
2000 PNC Plaza
500 W Jefferson Street
Louisville, KENTUCKY 40202-2828

*Monica Braun
STOLL KEENON OGDEN PLLC
300 West Vine Street
Suite 2100
Lexington, KENTUCKY 40507-1801

*Jody M Kyler Cohn
Boehm, Kurtz & Lowry
36 East Seventh Street
Suite 1510
Cincinnati, OHIO 45202

*Rebecca W Goodman
Assistant Attorney General
Office of the Attorney General Utility & Rate
1024 Capital Center Drive
Suite 200
Frankfort, KENTUCKY 40601-8204

*Honorable Kurt J Boehm
Attorney at Law
Boehm, Kurtz & Lowry
36 East Seventh Street
Suite 1510
Cincinnati, OHIO 45202

*Robert Conroy
LG&E and KU Energy LLC
220 West Main Street
Louisville, KENTUCKY 40202

*Honorable Kendrick R Riggs
Attorney at Law
Stoll Keenon Ogden, PLLC
2000 PNC Plaza
500 W Jefferson Street
Louisville, KENTUCKY 40202-2828

*Sara Veeneman
LG&E and KU Energy LLC
220 West Main Street
Louisville, KENTUCKY 40202

*Honorable Lindsey W Ingram, III
Attorney at Law
STOLL KEENON OGDEN PLLC
300 West Vine Street
Suite 2100
Lexington, KENTUCKY 40507-1801

*Louisville Gas and Electric Company
220 W. Main Street
P. O. Box 32010
Louisville, KY 40232-2010