

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	)	CASE NO.
APPROVAL OF ITS 2011 COMPLIANCE PLAN	)	2011-00162
FOR RECOVERY BY ENVIRONMENTAL	)	
SURCHARGE	)	

O R D E R

On June 1, 2011, Louisville Gas and Electric Company ("LG&E") filed an application, pursuant to KRS 278.020(1), KRS 278.183, and 807 KAR 5:001, Sections 8 and 9, for a Certificate of Public Convenience and Necessity ("CPCN") to remove the current Flue Gas Desulfurization ("FGD") systems on Mill Creek Generating Station ("Mill Creek") Units 1 and 2 and construct a single new FGD to serve both units; construct one new FGD to serve Mill Creek Unit 4; remove the existing FGD at Mill Creek Unit 3 and tie Unit 3 into the current Unit 4 FGD; and construct Particulate Matter Control Systems to serve all the generating units at Mill Creek and at Trimble County Generating Station Unit No. 1 ("TC1").<sup>1</sup> The application also sought approval of an amended compliance plan to allow LG&E to recover the costs of those and other new pollution control facilities through its Environmental Surcharge tariff ("2011

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<sup>1</sup> On the same date, LG&E's sister company, Kentucky Utilities Company ("KU"), filed a similar application, which was docketed as 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.

Environmental Compliance Plan”). The total capital cost of the proposed new projects to the 2011 Environmental Compliance Plan is estimated to be \$1.4 billion.

By letter dated June 14, 2011, the Commission informed LG&E that its application was deficient for failing to provide the appropriate number of copies concerning LG&E’s exhibits and appendices to its pre-filed testimony. LG&E cured the deficiency on June 16, 2011, and its application was accepted for filing as of that date. KRS 278.183(2) imposes a six-month statutory deadline in which the Commission must consider and rule upon the proposed 2011 Environmental Compliance Plan. Accordingly, the deadline for the issuance of an order in this matter is December 15, 2011.

The following parties were granted full intervention in this matter: (1) the Attorney General of the Commonwealth of Kentucky, by and through his Office of Rate Intervention; (2) the Metropolitan Housing Coalition; (3) Kentucky Industrial Utility Customers, Inc.; (4) The Kroger Co.; (5) Rick Clewett, Raymond Barry, Sierra Club, and Natural Resources Defense Council (collectively, “Environmental Intervenors”); and (6) the United States Department of Defense and other Federal Executive Agencies.

On June 28, 2011, the Commission issued an Order establishing a procedural schedule for the processing of this case. The procedural schedule provided for two rounds of discovery on LG&E, an opportunity for the filing of intervenor testimony, one round of discovery on intervenor testimony, and an opportunity for LG&E to file rebuttal testimony. The Commission also scheduled and held a public meeting in Louisville, Kentucky on September 6, 2011 to receive public comments on the 2011 Environmental

Compliance Plan and associated environmental surcharge requests submitted by LG&E.

At the request of LG&E, informal conferences were held at the Commission's offices on November 4 and 7, 2011. On November 10, 2011, the parties to this matter filed a unanimous Settlement Agreement, Stipulation and Recommendation ("Settlement Agreement"),<sup>2</sup> which is attached to this Order as Appendix A. A public hearing was held on November 9<sup>3</sup> and 10, 2011 at the Commission's offices in Frankfort.

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<sup>2</sup> The Settlement Agreement is a global agreement in which the parties in the instant case and in Case No. 2011-00161 agreed to a full and unanimous resolution of any and all issues relating to both cases.

<sup>3</sup> At the request of the parties, the formal hearing on November 9, 2011 was adjourned after the taking of public comments in order for the parties to continue their settlement discussions. The Commission granted the request and adjourned the hearing. The parties subsequently conferred to continue their settlement negotiations. Ultimately, the parties were able to arrive at a unanimous settlement of all the issues in this matter.

The matter is now before the Commission for a decision. As described on the following pages, the Commission determines that it is in the public interest to approve the Settlement Agreement.

LG&E's 2011 Environmental Compliance Plan<sup>4</sup>

LG&E maintains that the proposed environmental projects are required to comply with the federal Clean Air Act as amended, the Cross-State Air Pollution Rule ("CSAPR") (successor to the proposed Clean Air Transport Rule ["CATR"]), the proposed National Emission Standards for Hazardous Air Pollutants ("HAPs Rule"), the U. S. Environmental Protection Agency's ("EPA") new one-hour sulfur dioxide National Ambient Air Quality Standard ("NAAQS"), and other environmental requirements that apply to LG&E facilities used in the production of energy from coal.<sup>5</sup>

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<sup>4</sup> The Environmental Intervenors also contend that LG&E failed to consider the Water Intake Structure Rule, which could impose significant costs on generating units that use once-through cooling. The Water Intake Structure Rule, Section 316(b) of the Clean Water Act, 33 U.S.C. § 1326, is designed to protect fisheries and aquatic organisms from being trapped by cooling water screens, or uptake into cooling systems. The EPA set new standards aimed at reducing the impingement and entrainment of aquatic organisms from cooling water intake structures at new and existing electric generating facilities. The Environmental Intervenors argue that Mill Creek Unit 1 will likely be subject to this EPA rule and that a cooling tower will be needed at an estimated cost of \$70 million. LG&E contends that such a cooling tower may not be needed; that the proposed rule requires compliance based upon the best technology available, which is to be determined on a case-by-case basis; and that even assuming a cooling tower is needed, the cost will be \$19 million or less based upon LG&E's experience with building a new mechanical draft cooling tower for Trimble County Unit 1. Given that the Settlement Agreement resolves any and all issues raised in this case, including any issues relating to the Water Intake Structure Rule, the Commission deems this particular issue to be moot.

<sup>5</sup> Application, p. 1-2.

## CSAPR

The EPA issued the final CSAPR on July 6, 2011. The rule became effective on October 7, 2011, with the first phase of SO<sub>2</sub> and annual NO<sub>x</sub> compliance requirements becoming effective on January 1, 2012. A second, more stringent phase of SO<sub>2</sub> compliance obligations will go into effect on January 1, 2014. The rule's ozone-season NO<sub>x</sub> emission limits will become effective on May 1, 2012.

LG&E will be allocated a limited number of SO<sub>2</sub> and NO<sub>x</sub> allowances each year under CSAPR. Each allowance entitles the holder to emit one ton of the pollutant covered by the allowance. LG&E's allowance allocations under CSAPR (as revised on October 6, 2011) are as follows:<sup>6</sup>

- SO<sub>2</sub> (2012) 37,306
- SO<sub>2</sub> (2013) 38,115
- SO<sub>2</sub> (2014-2017) 17,170
- SO<sub>2</sub> (2018) 17,503
- Annual NO<sub>x</sub> (2012-2013) 13,871
- Annual NO<sub>x</sub> (2014+) 12,620

## HAPs Rule

The HAPs Rule regulates emissions of mercury, particulate matter (as a surrogate for hazardous non-mercury metals), and hydrogen chloride ("HCl"). For coal-

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<sup>6</sup> Schram/Revlett Supplemental Response to Staff Request, Item No. 50, filed October 12, 2011.

fired units designed for coal with an energy content of at least 8,300 Btu/lb (which includes all of LG&E's coal-fired units), the proposed HAPs Rule's mercury emission limit is 1.2 lbs/TBtu. The HAPs Rule's emission limit for total particulate matter from existing electric generating units is 0.030 lb/MMBTu. For HCl, the HAPs Rule's emission limit from existing electric generating units is 0.0020 lb/MMBTu. However, the HAPs Rule allows SO<sub>2</sub> to be measured as a surrogate for directly measuring HCl, and this is the measure that LG&E will use. The SO<sub>2</sub> limit as a surrogate for HCl under the HAPs Rule is 0.20 lb/MMBTu.

Although it is expected that the EPA will issue the final HAPs Rule by no later than December 16, 2011, LG&E asserts that it is prudent for it to act now to ensure timely compliance. LG&E notes that, barring unprecedented presidential intervention, a maximum of four years is all the time that a utility will have to comply with the HAPs Rule. Because of the tight compliance period, LG&E states that delaying obtaining firm contracts to build such pollution control facilities could result in having to pay higher prices for labor and materials as demand for those resources will increase in the scramble to comply with these new stringent air regulations.

#### Project 26: Mill Creek Air Compliance

LG&E proposes to build two new FGDs (one to serve both Mill Creek Units 1 and 2, another to serve Mill Creek Unit 4), to tie Mill Creek Unit 3 into the existing (but upgraded) Mill Creek Unit 4 FGD, and then to remove the current FGDs on Mill Creek Units 1, 2, and 3. These new and upgraded facilities are to comply with the one-hour SO<sub>2</sub> NAAQS, under which Jefferson County, Kentucky is expected to be declared a nonattainment area and would require SO<sub>2</sub> emission reductions at Mill Creek. These

projects also support compliance with the proposed reductions on the emission of SO<sub>2</sub> required by CATR. The project also includes modifications to various systems at Mill Creek Units 3 and 4 to expand the operating range of the units at which their existing Selective Catalytic Reduction (“SCR”) equipment can function to reduce nitrogen compound (“NO<sub>x</sub>”) emissions. Currently, the SCRs can operate only when the Mill Creek units are operating at relatively high generating load levels due to the SCR requiring high flue gas temperatures. The proposed modifications would allow the SCRs to operate, and thus to remove NO<sub>x</sub>, when the generating units are running at lower load levels.

Project 26 also includes an upgrade to the Unit 4 SCR to enhance its NO<sub>x</sub> removal efficiency through the installation of additional ammonia injection points and static mixing vanes within the flue gas ductwork prior to the SCR. This SCR is not performing as efficiently as other SCRs in the fleet, and the proposed modifications provide additional margin against the NO<sub>x</sub> tonnage caps in the EPA regulations, thus deferring the need for additional SCR installations and supporting least-cost compliance with the proposed CATR, which will impose stricter NO<sub>x</sub> emissions requirements on LG&E.

Project 26 further includes the addition of Particulate Matter Control Systems to serve each of the four Mill Creek units.<sup>7</sup> Each Particulate Matter Control System comprises a pulse-jet fabric filter (“baghouse”) to capture particulate matter, a Powdered Activated Carbon (“PAC”) injection system to capture mercury, a lime injection system to protect the baghouse from the corrosive effects of sulfuric acid mist (“SAM”) and

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<sup>7</sup> Direct Testimony of Gary H. Revlett, p. 13.

other balance-of-plant support system changes, such as ash collection transport systems and fans.<sup>8</sup> These Particulate Matter Control Systems will be similar to the baghouse (including the lime and PAC injection systems) installed at Trimble County Unit 2 (“TC2”) as part of the overall air quality control system approved by the Commission as part of LG&E’s 2006 Environmental Compliance Plan. These systems are designed to meet the mercury and particulate emissions reduction requirements contained in the proposed HAPs Rule. The lime injection systems’ and the previously approved SAM mitigation systems’ sorbent Operation and Maintenance (“O&M”) costs are proposed to be reported as part of Project 26’s sulfuric acid mist-sorbent-orientation and management costs for two reasons. First, LG&E indicated that it cannot track separately the SAM sorbent being used by multiple environmental facilities related to different Environmental Cost Recovery (“ECR”) projects at the same generating unit; and second, each generating unit’s SAM sorbent costs are recorded in the same subaccount, making it very difficult to determine how much SAM sorbent cost should be reported with reasonable certainty for each project.<sup>9</sup> The total capital cost of the facilities proposed at Mill Creek is estimated to be \$1,268.22 million.

#### Project 27: Trimble County Air Compliance

Project 27 consists of adding a Particulate Matter Control System to TC1 including installing supporting ash transport system upgrades. The TC1 Particulate Matter Control System will be similar to the comparable equipment installed and operating at TC2 and proposed herein for installation at Mill Creek. The proposed

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<sup>8</sup> Direct Testimony of John N. Voyles (“Voyles Direct”), p. 7-8.

<sup>9</sup> Id.



Particulate Matter Control System is necessary to meet the mercury and particulate emissions reduction requirements contained in the proposed HAPs Rule. LG&E proposes to report the existing TC1 SAM mitigation system's sorbent O&M costs as part of Project 27's SAM-sorbent-O&M for the same reasons as proposed for reporting the costs at Mill Creek. The total capital cost of the facilities proposed at Mill Creek is estimated to be \$123.75 million.

#### LG&E's Air Compliance Analysis and Methodology

In May 2010, LG&E retained Black and Veatch, an engineering firm, to assist in providing conceptual engineering and developing construction cost estimates for the least-cost option for installing emission controls at each of LG&E's generation units to comply with expected future regulatory requirements. LG&E provided Black and Veatch with all of the emission control facilities cost and performance data used in the analyses. LG&E, with the assistance of Black and Veatch, arrived at various suites of environmental control facilities to be placed on each of the company's units. Appendix B contains a chart summarizing LG&E's proposed environmental control facilities and their projected cost of operation through 2020.

LG&E worked with Black and Veatch through two phases of initial engineering to develop unit-by-unit compliance options. Where compliance is not measured on a unit-by-unit basis (CSAPR and HAPs Rule), LG&E conducted an analysis to demonstrate the need for emission controls on a station- or system-wide basis. Once that was accomplished, LG&E performed an analysis to determine if all of the compliance equipment would be necessary to achieve compliance with the applicable air regulations. The results of that analysis were used by LG&E to pare down and refine

the compliance equipment to be included in each project and ultimately to determine, for each generating unit, whether it would be more cost-effective to install the pollution control facilities or to retire the unit and buy replacement capacity by comparing the revenue requirement for installing controls to the revenue requirements of retiring and replacing capacity. The revenue requirement is reduced to a present value in 2011 dollars ("PVRR") and based on a 30-year study period (2011-2040).

Under the installation of controls scenario, LG&E considered the capital and fixed operating and maintenance costs of the controls as well as the associated impact on total system production costs. Under the retirement scenario, LG&E considered the capital and fixed operating and maintenance savings associated with retiring a unit, the costs of either installing and operating replacement capacity or purchasing capacity, and the overall impact of the modified generation portfolio on system production costs.

As a result of its engineering and modeling processes, LG&E states that its 2011 Environmental Compliance Plan reflects a cost-effective means of complying with the applicable air regulations. Specifically, LG&E's 2011 Environmental Compliance Plan includes installing additional environmental controls on its Mill Creek and TC1 coal units. The joint analysis submitted by LG&E and KU on November 3, 2011, in response to a Commission Staff information request, demonstrates that, under 11 of the 15 sensitivity scenarios that were modeled, the LG&E and KU 2011 Environmental Compliance Plans produced the lowest PVRR.<sup>10</sup>

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<sup>10</sup> The scenarios under which the KU and LG&E proposed environmental plans did not produce the lowest PVRR included estimates of CO<sub>2</sub> prices, the addition of SCR devices on all units not already equipped with an SCR, or a combination thereof.

## Settlement Agreement

As a result of the November informal conferences, LG&E filed a unanimous Settlement Agreement which it 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, which is attached hereto and incorporated herein as Appendix A, are as follows:

1. All parties to the case, except the Environmental Intervenors, stipulate and support the approval of LG&E's 2011 Environmental Cost Recovery Plan as reasonable and cost-effective under KRS 278.183 and the issuance of CPCNs for the projects included therein. The Environmental Intervenors do not support LG&E's plans for Mill Creek or TC1, but they agree to not challenge the reasonableness or cost-effectiveness of LG&E's Compliance Plan or the requested CPCNs.

2. LG&E will seek to increase its short-term borrowing limit to \$500 million, subject to approval by the Federal Energy Regulatory Commission.

3. LG&E will use short-term debt as the first form of financing for capital projects.

4. LG&E will evaluate the cost-effectiveness, reasonableness, and feasibility of issuing tax-exempt pollution control bonds in connection with long-term debt financings.

5. In the six-month and two-year review proceedings under KRS 278.183(3), LG&E will calculate the short-term debt rate using average daily balances and daily interest rates, and will calculate the long-term debt rate using daily balances and daily

interest rates in connection with the ECR true-up calculations for the actual weighted average cost of capital.

6. The return on equity to be used for all projects and items contained in LG&E's 2009, 2006, and 2005 Environmental Compliance Plans shall remain at the current level of 10.63 percent unless prospectively changed by a future Commission order.

7. The return on equity to be used for all projects and items contained in LG&E's 2011 Environmental Compliance Plan shall be 10.10 percent unless prospectively changed by a future Commission order.

8. The total amount of ECR revenue to be collected from each of the following LG&E rate classes will be determined on the current total revenue methodology, which uses total utility revenues to allocate revenues between rate classes; RS Residential Service, VFD Volunteer Fire Department Service, LS Lighting Service, RLS Restricted Lighting Service, LE Lighting Energy Service, TE Traffic Energy Service, DSK Dark Sky Friendly, LEV Low Emission Vehicle Service, and RRP Residential Responsive Pricing Service.

9. The calculation of the ECR factor for rate classes GS General Service, PS Power Service, ITODS Industrial Time-of-Day Secondary Service, CTODS Commercial Time-of-Day Secondary Service, ITODP Industrial Time-of-Day Primary Service, CTODP Commercial Time-of-Day Primary Service, RTS Retail Transmission Service, FLS Fluctuating Load Service, GRP General Responsive Pricing Service, and special contracts will be based on non-fuel revenues, rather than total revenues as previously utilized for all rate classes.

10. With respect to the change in revenue allocation referenced above in paragraph 9, LG&E will propose to adopt that change in its currently pending environmental surcharge two-year review case, and the impact of implementing that change will be reviewed and addressed, if appropriate, by LG&E in its two subsequent environmental surcharge two-year reviews or ECR compliance plan proceedings.

11. LG&E's and KU's shareholders will make two additional annual contributions totaling \$500,000 to the companies' Home Energy Assistance ("HEA") programs, consisting of a shareholder contribution of \$250,000 in each of 2011 and 2012. These contributions will be split evenly between the LG&E and KU HEA Programs.

12. Effective January 1, 2012, LG&E's HEA charges will increase from 15 cents to 16 cents for each electric and each gas meter, and will remain at the 16-cent level until the next change in LG&E's base rates.

#### Legal Standards

##### CPCN

No utility may construct any facility to be used in providing utility service to the public until it has obtained a CPCN from this Commission.<sup>11</sup> To obtain a CPCN, the utility must demonstrate a need for such facilities and an absence of wasteful duplication.<sup>12</sup>

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<sup>11</sup> KRS 278.020(1).

<sup>12</sup> *Kentucky Utilities Co. v. Pub. Serv. Comm'n*, 252 S.W.2d 885 (Ky. 1952).

“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 and 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.<sup>13</sup>

“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.”<sup>14</sup> 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 alternatives has been performed.<sup>15</sup> Selection of a proposal that ultimately costs more than an alternative does not necessarily result in wasteful duplication.<sup>16</sup> All relevant factors must be balanced.<sup>17</sup>

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<sup>13</sup> Id. at 890.

<sup>14</sup> Id.

<sup>15</sup> Case No. 2005-00142, Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a Certificate of Public Convenience and Necessity for the Construction of Transmission Facilities in Jefferson, Bullitt, Meade, and Hardin Counties, Kentucky (Ky. PSC, Sept. 8, 2005).

<sup>16</sup> See Kentucky Utilities Co. v. Pub. Serv. Comm’n, 390 S.W.2d 168, 175 (Ky. 1965). See also Case No. 2005-00089, Application of East Kentucky Power Cooperative, Inc. for a Certificate of Public Convenience and Necessity for the Construction of a 138 kV Transmission Line in Rowan County, Kentucky (Ky. PSC, Aug. 19, 2005).

<sup>17</sup> Case No. 2005-00089, Order dated August 19, 2005, at 6.

### Environmental Cost Recovery 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 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.

## FINDINGS

The evidentiary record developed in this case is massive, consisting of hundreds of thousands of pages of documents, many filed in paper format, but those too voluminous for paper filing were submitted on compact discs. Numerous economic modeling runs were performed and filed by the parties in support of their respective positions. Having thoroughly reviewed the extensive evidentiary record, the Settlement Agreement, and being otherwise sufficiently advised, the Commission has made an independent analysis to determine the reasonableness of the Settlement Agreement. Our analysis is based on the current emission levels at LG&E's generating units; the future levels of emission reductions needed to be in compliance with EPA regulations; and the modeling results of the present value costs to construct and operate environmental retrofits to LG&E's existing generation versus retiring coal-fired generation and either constructing and operating gas-fired generation or purchasing capacity. Based on the Commission's analysis of the record, we find that the provisions of the Settlement Agreement, when viewed in total, represent the most reasonable and cost-effective course of action for LG&E to meet its environmental obligations under the EPA regulations under consideration in this case.

The Commission also finds that the Settlement Agreement represents diverse interests and divergent points of view. We note that the intervenors in this proceeding represent a broad cross section of LG&E's customer base, including residential, commercial and industrial concerns, government, low- and fixed-income individuals, and environmental organizations. Indeed, given the sheer magnitude and significance of this matter driven by the increased stringent federal air emission standards made more



urgent by the short compliance time frame, the Commission retained an external consultant as authorized in environmental surcharge cases of this type under the provisions of KRS 278.183(4). The consultant assisted Commission Staff in propounding requests for information and developing the evidentiary record now before us in this case.

The Commission is very encouraged by the scope and breadth of the terms of the Settlement Agreement and we compliment the parties to this matter on the results they were able to achieve. We find that the Settlement Agreement represents a reasonable resolution to the issues surrounding LG&E's proposed 2011 Environmental Compliance Plan and should be approved. While the Commission finds that the Settlement Agreement should be approved, we believe the evidence of record requires that we specifically address several additional issues.

#### Revenue Allocation

The first of these issues is the change in revenue allocation for GS – General Service class customers, many having relatively low electric usage. While this change was agreed to by all parties and is to be effective in early 2012, we note the wisdom of the provision in the Settlement Agreement requiring the impact of this change in revenue allocation be addressed by LG&E in its next two two-year Environmental Surcharge review cases. LG&E has also reserved the right to present recommended changes to this new allocation methodology, if appropriate, after consultation with affected customer representatives, and the Commission also intends to monitor the impact of this change.

### Construction Monitoring

The environmental construction projects being approved by this Order are estimated to cost \$1,392 million. These projects are very significant in size, scope, and, particularly, cost. The projects will be constructed almost simultaneously on multiple generating units at two different generating stations. While LG&E has committed to *solicit bids for all aspects of each project that exceeds \$25,000*,<sup>18</sup> the Commission believes that it is necessary and appropriate to monitor the status and progress of the construction of the projects approved herein. The scope of our monitoring is currently anticipated to encompass, in general, all phases of the projects, including LG&E's management plans, engineering processes, procurement plans, construction, startup, commissioning, in-service verification, and closeout. The Commission intends to perform this monitoring with the assistance of the external consultant that was retained in this case. The costs of monitoring are expected to be relatively minimal in comparison to the costs of the projects, with the costs of monitoring being recoverable by LG&E through its Environmental Surcharge. LG&E will be required to file quarterly reports detailing, among other items, the results of bidding procedures, the status of construction, adherence to budgets, adherence to timelines, advance notice of any construction impacts on system reliability, and significant change orders. The exact content of these reports will be determined in the near future.

### Environmental Surcharge Monthly Reports

Pursuant to the terms of the Settlement Agreement, LG&E filed revised formats for its monthly Environmental Surcharge Reports. The revised reporting formats will be

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<sup>18</sup> Voyles Direct Testimony, p. 25.

filed by LG&E each month and are necessary to reflect the new projects approved herein, as well as the revised revenue allocation agreed to by the parties. Although these revised forms are reasonable, the Commission finds that an additional modification should be made to explicitly reflect the cost of monitoring as discussed above.

#### Consumer and Commission Concerns

In granting our approval of LG&E's Environmental Surcharge Plan, we recognize that the level of capital expenditures is extremely high, and that these capital costs, plus the related operation and maintenance expenses, will result in very significant annual increases in customer rates over the next four years and those increases will be included in customer rates over the life of the new environmental facilities. The Commission acknowledges the large number of customer letters and petitions filed in opposition to LG&E's Environmental Compliance Plan and the resulting rate increases. We have carefully considered these numerous written and verbal comments from LG&E's customers concerning the significant impact on LG&E's rates. However, the record of evidence demonstrates that LG&E has selected the least costly options for meeting its environmental requirements. Further, the Commission notes that the General Assembly, in enacting KRS 278.183(1), has made it very clear that an electric utility, such as LG&E, has the right to the current recovery by environmental surcharge of its reasonable and prudent costs for complying with the Federal Clean Air Act as amended as well as those federal, state, or local environmental regulations applicable to coal combustion wastes and by-products from facilities utilized for production of energy from coal.

The large number of customers registering opposition to LG&E's application and future rate increases is but one indication of the sluggish economy in the Commonwealth. Due to the relatively high level of unemployment in Kentucky, the Commission will expect LG&E, as well as its contractors and subcontractors, to hire a local work force to the extent possible when undergoing construction of the environmental projects approved herein.

#### Revisions to Environmental Requirements

One of the issues raised in this case was whether LG&E should be authorized to proceed at this time with its proposed environmental projects, even though EPA's HAPs Rule is not yet final, and even though LG&E may be required to comply with new or revised environmental rules in the future. LG&E affirmatively addressed this issue with respect to the HAPs Rule by committing to promptly notify the Commission in the event that a future revision in that rule impacts an approved environmental project. In addition, LG&E acknowledged that it "will not use such authority [as granted in this case] to make imprudent investments."<sup>19</sup> In an effort to help ensure that all environmental investments are prudent, the Commission finds that LG&E should promptly file notice of either a change in an existing environmental requirement or the finalization of a new requirement, along with an analysis of the impacts on facilities in service and under construction.

#### Motion to File Corrected Testimony and Substitute Witness

On November 3, 2011, the Environmental Intervenors filed a motion to allow the filing of corrections to their previously filed direct testimony of William Steinhurst, and to

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<sup>19</sup> Voyles Rebuttal Testimony, p. 3-4.

allow James Richard Hornby to adopt Mr. Steinhurst's testimony due to his unavailability at the scheduled hearing. Also attached to that motion was the corrected direct testimony of another of their witnesses, Dr. Jeremy Fisher. LG&E filed a response objecting to this filing of corrected testimonies claiming it is untimely, it improperly characterizes new testimony as corrections, and it fails to include the Strategist input and output files supporting the corrections. The Environmental Intervenors have now moved to withdraw the corrected testimony of Dr. Jeremy Fisher, noting that all parties have entered into a Settlement Agreement. Having considered the motion, the Commission finds that the corrections to Mr. Steinhurst's testimony should be accepted, the adoption of his testimony should be denied as moot due to the Settlement Agreement, and the corrections to Dr. Fisher's testimony should be withdrawn.

IT IS THEREFORE ORDERED that:

1. LG&E is granted a CPCN to remove the existing FGD at Mill Creek Units 1 and 2 and build a new FGD for both Units; upgrade the existing FGD at Mill Creek Unit 4, remove the existing FGD at Mill Creek Unit 3, and tie Unit 3 into the upgraded FGD now at Unit 4; build a new FGD at Mill Creek Unit 4; and build Particulate Matter Control Systems at Mill Creek Units 1, 2, 3, and 4 and at TC 1.
2. LG&E's 2011 Environmental Compliance Plan, consisting of Project 26 and Project 27, is approved.
3. The proposed revisions to Rate Schedule ECR are approved.

4. The proposed revisions and additions to LG&E's monthly ES forms are approved as modified in the findings above, with the effective date of the revisions approved as requested.

5. The Settlement Agreement, attached hereto and incorporated herein as Appendix A, is approved in its entirety.

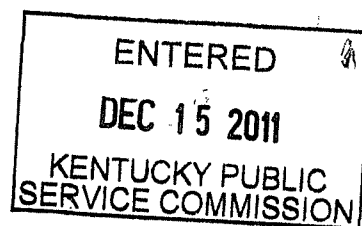
6. Within 10 days of the date of this Order, LG&E shall file with the Commission revised tariff sheets setting out Rate Schedule ECR as approved herein and reflecting that it was approved pursuant to this Order.

7. The Environmental Intervenors' corrected testimony of Mr. Steinhurst is accepted for filing, their corrected testimony of Dr. Fisher is withdrawn from the record, and their request to substitute a witness is denied as moot.

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

By the Commission



ATTEST:

*Cassandra D. Stanwell for*  
Executive Director

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE  
COMMISSION IN CASE NO. 2011-00162 **DEC 15 2011**

## **SETTLEMENT AGREEMENT, STIPULATION, AND RECOMMENDATION**

This Settlement Agreement, Stipulation, and Recommendation (“Settlement Agreement”) is entered into this 9th day of November 2011 by and between Kentucky Utilities Company (“KU”); Louisville Gas and Electric Company (“LG&E”) (collectively, the “Companies”); Kentucky Industrial Utility Customers, Inc. (“KIUC”); Attorney General for the Commonwealth of Kentucky, by and through his office of Rate Intervention (“AG”); Community Action Council for Lexington-Fayette, Bourbon, Harrison and Nicholas Counties, Inc. (“CAC”); Lexington-Fayette Urban County Government (“LFUCG”); The Kroger Co. (“Kroger”); Metropolitan Housing Coalition (“MHC”); United States Department of Defense and Other Federal Executive Agencies (“DOD/FEA”); and Rick Clewett, Raymond Berry, Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council (“Environmental Group”) (collectively, the “Intervenors”) in the proceedings involving KU and LG&E, which proceedings are the subject of this Settlement Agreement as set forth below:

### **WITNESSETH:**

**WHEREAS**, KU filed on June 1, 2011, with the Kentucky Public Service Commission (“Commission”) its Application and Testimony in *The Application of Kentucky Utilities Company for Certificates of Public Convenience and Necessity and Approval of Its 2011 Compliance Plan for Recovery by Environmental Surcharge*, and the Commission has established Case No. 2011-00161 to review KU’s application;

**WHEREAS**, LG&E filed on June 1, 2011, with the Commission its Application and Testimony in *The Application of Louisville Gas and Electric Company for a Certificates of Public Convenience and Necessity and Approval of Its 2011 Compliance Plan for Recovery by Environmental Surcharge*, and the Commission has established Case No. 2011-00162 to review LG&E’s application;



**WHEREAS**, the Commission issued deficiency letters to LG&E and KU concerning their applications on June 14, 2011, which deficiencies LG&E and KU subsequently cured, and the Commission, by Order dated June 21, 2011, accepted the applications as filed on June 16, 2011;

**WHEREAS**, KIUC filed petitions to intervene in both proceedings on May 18, 2011, and was granted intervention by the Commission in both proceedings on May 23, 2011;

**WHEREAS**, AG filed petitions to intervene in both proceedings on May 25, 2011, and was granted intervention by the Commission in both proceedings on June 3, 2011;

**WHEREAS**, CAC filed a petition to intervene in only Case No. 2011-00161 on June 3, 2011, and was granted intervention by the Commission on June 16, 2011;

**WHEREAS**, LFUCG filed a petition to intervene in only Case No. 2011-00161 on June 8, 2011, and was granted intervention by the Commission on June 16, 2011;

**WHEREAS**, Kroger filed petitions to intervene in both proceedings on June 14, 2011, and was granted intervention by the Commission in both proceedings on June 16, 2011;

**WHEREAS**, MHC filed a petition to intervene in only Case No. 2011-00162 on June 15, 2011, and was granted intervention by the Commission in both proceedings on June 23, 2011;

**WHEREAS**, Rick Clewett, Raymond Berry, Sierra Club, and the Natural Resources Defense Council filed a petition to intervene in Case No. 2011-00161 on June 16, 2011, and were granted intervention by the Commission on July 27, 2011; and Drew Foley, Janet Overman, Gregg Wagner, Sierra Club, and the Natural Resources Defense Council filed a petition to intervene in Case No. 2011-00162 on June 16, 2011, and were granted intervention by the Commission on July 27, 2011;

**WHEREAS**, DOD/FEA filed a petition to intervene in only Case No. 2011-00162 on July 6, 2011, and was granted intervention by the Commission on July 15, 2011;

**WHEREAS**, an informal conference for the purpose of reviewing the status of the case and discussing the possible settlement of issues, attended in person or by phone by representatives of the Intervenors, the Commission Staff, and the Companies, took place on November 4, 7, and 9, 2011, at the offices of the Commission;

**WHEREAS**, the Companies and the Intervenors hereto desire to settle issues pending before the Commission in the above-referenced proceedings;

**WHEREAS**, the adoption of this Settlement Agreement will eliminate the need for the Commission and the parties to expend significant resources litigating these proceedings, and eliminate the possibility of, and any need for, rehearing or appeals of the Commission's final orders herein;

**WHEREAS**, the Intervenors and the Companies agree that this Settlement Agreement, viewed in its entirety, is a fair, just, and reasonable resolution of all the issues in the above-referenced proceedings;

**WHEREAS**, it is understood by the parties hereto that this Settlement Agreement is subject to the approval of the Commission insofar as it constitutes an agreement by the parties to the proceedings for settlement; and

**WHEREAS**, it is the position of the parties hereto that this Settlement Agreement is supported by sufficient and adequate data and information, and should be approved by the Commission.

**NOW, THEREFORE**, for and in consideration of the premises and conditions set forth herein, the parties hereto stipulate and agree as follows:

**SECTION 1. Overall Recommendation.** The parties to this Settlement Agreement recommend the Commission approve the respective applications of LG&E and KU in the above-captioned cases filed on June 1, 2011 (accepted for filing on June 16, 2011), and grant the relief requested therein as amended by the terms of this Settlement Agreement, and as more specifically stated below, by entering orders on or before December 16, 2011, approving LG&E's and KU's applications in their entirety except as described in the following Sections.

**SECTION 1.01** All parties to this agreement except the Environmental Intervenors stipulate and support KU's 2011 Environmental Cost Recovery ("ECR") Compliance Plan, as amended herein, and LG&E's 2011 ECR Compliance Plan as reasonable and cost-effective for purposes of KRS 278.183; parties recommend the Compliance Plans be approved and Certificates of Public Convenience and Necessity ("CPCNs") for requested projects in KU's application, as amended, and LG&E's application be granted; and ECR surcharge recovery of the costs for the 2011 ECR Compliance Plans, as amended by the terms of this Settlement Agreement, be approved.

**SECTION 1.02** Environmental Intervenors do not support KU's plans to retrofit the Ghent power plant, and LG&E's plans to retrofit the Mill Creek and Trimble power plant; however, Environmental Intervenors agree not to challenge the reasonableness or cost-effectiveness for purposes of KRS 278.183 of KU's ECR Compliance Plan, as amended, and LG&E's Compliance Plan or CPCNs for requested projects in KU's application, as amended and LG&E's application, or ECR surcharge recovery of the costs for the 2011 ECR Compliance plans, as modified by the terms of this settlement. The Environmental Intervenors' main motivation for not opposing the

CPCNs and the Companies' 2011 ECR Compliance Plans is to support their low-income housing advocate allies.

**SECTION 2. Removing E.W. Brown Units 1 and 2 from the KU 2011 ECR Compliance Plan and Withdrawing KU's Related Request for a Certificate of Public Convenience and Necessity.**

**SECTION 2.01** KU agrees to withdraw from its application the portion of Project No. 34 in KU's 2011 ECR Compliance Plan concerning the proposed "Particulate Matter Control System," defined as a pulse-jet fabric filter or "baghouse" to capture particulate matter, a Powdered Activated Carbon injection system to capture mercury, a lime injection system to protect the baghouses from the corrosive effects of sulfuric acid mist ("SAM") and other balance-of-plant support system changes such as ash collection and transport systems and fans, to serve each of Brown Units 1 and 2, except the SAM mitigation equipment consisting of sorbent injection systems on Brown Units 1 and 2 that are independent of the lime injection systems associated with the baghouses. The SAM mitigation systems for Brown Units 1 and 2 are necessary to meet the Title V SAM emissions requirement for Brown that arose from a U.S. Environmental Protection Agency ("EPA") enforcement action.

**SECTION 2.02** KU agrees to withdraw the portion of its application requesting a CPCN to permit the construction of a Particulate Matter Control System to serve Brown Units 1 and 2.

**SECTION 2.03** The foregoing notwithstanding, KU will continue to dispatch, operate, and maintain Brown Units 1 and 2 as part of its generation fleet as long

as, and to the extent to which, it is reasonable and cost-effective to do so while complying with all applicable environmental regulations.

**SECTION 2.04** KU further agrees that, in any applications filed under KRS 278.020 or KRS 278.183 seeking a CPCN to permit the construction of a Particulate Matter Control System to serve Brown units 1 and 2 or approval of cost recovery for such equipment and related costs through the ECR mechanism, it will not ask the Commission to issue an order granting the requested relief before January 1, 2014, and will not file such request before July 1, 2013, unless finalized changes in the proposed utility MACT rules, future finalized ambient air quality standards, or other regulations finalized after the date of this agreement establish new environmental requirements for Brown Units 1 or 2. The parties acknowledge that KU projects that it would need two years from the date of Commission approval to complete the construction of the retrofit project.

**SECTION 2.05** Nothing contained herein shall prohibit any party to this agreement from seeking to intervene in any future proceeding or challenge any application filed by the Companies for the retrofitting of Brown Units 1 and 2, except that the recovery of additional costs resulting from the delay in deciding whether to retrofit Brown Units 1 and 2, including, but not limited to, fuel costs, purchase power, and construction costs, will not be challenged by any party to this Settlement Agreement. Subject to the foregoing restriction, any other challenge to such an application may include the argument that the cost of retrofitting the units is not reasonable or cost effective pursuant to KRS Chapter 278.

### **SECTION 3. Financing**

**SECTION 3.01** Each of KU and LG&E will seek to increase its short-term borrowing limit to \$500 million, subject to approval by the Federal Energy Regulatory Commission (“FERC”).

**SECTION 3.02** KU and LG&E will use short term debt as the first form of financing for capital projects. The Companies expect to allow their short-term debt balances to accumulate to approximately \$250 million at each company, at which time first mortgage bonds would be issued in a minimum size of \$250 million. Market conditions may accelerate or delay the timing of the long-term debt issuances or increase the size of such issuances.

**SECTION 3.03** KU and LG&E will evaluate the cost-effectiveness, reasonableness, and feasibility of issuing tax-exempt pollution control bonds in connection with long-term debt financings.

**SECTION 3.04** In the six-month and two-year review proceedings under KRS 278.183(3), KU and LG&E will calculate the short-term debt rate using average daily balances and daily interest rates, and will calculate the long-term debt rate using daily balances and daily interest rates in connection with the ECR true-up calculations for the actual weighted average cost of capital.

### **SECTION 4. Return on Equity**

**SECTION 4.01** The return on equity to be used concerning all projects and items contained in KU’s and LG&E’s 2009, 2006, and 2005 ECR Compliance Plans, the costs of which KU and LG&E currently recover through their respective ECR

mechanisms, shall remain at the current level of 10.63% unless prospectively changed by a future Commission order.

**SECTION 4.02** The return on equity to be used concerning all projects and items contained in KU's and LG&E's 2011 ECR Compliance Plans, the costs of which KU and LG&E will recover through their respective ECR mechanisms, shall be 10.10% unless prospectively changed by a future Commission order.

**SECTION 4.03** The parties acknowledge the Commission's jurisdiction under KRS Chapter 278 to regulate the Companies' rates and service. The parties further acknowledge the AG's statutory right pursuant to KRS 367.150 to act as an advocate for customers in proceedings before the Commission, including the right to file a rate complaint pursuant to KRS 278.260.

## **SECTION 5. Revenue Allocation**

**SECTION 5.01** Each utility's current ECR revenue allocation methodology, which uses total utility revenues to allocate ECR revenues between rate classes, will continue to be used as modified by the two-step methodology described in Section 5.

**SECTION 5.02** Each utility's total ECR revenues to be collected will be allocated between each rate class on a total-revenues basis.

**SECTION 5.03** The total amount of ECR revenues to be collected from each of following LG&E rate classes will be determined on a total-revenues basis: RS Residential Service, VFD Volunteer Fire Department Service, LS Lighting Service, RLS Restricted Lighting Service, LE Lighting Energy Service, TE Traffic Energy Service,

DSK Dark Sky Friendly, LEV Low Emission Vehicle Service, and RRP Residential Responsive Pricing Service. The total amount of ECR revenues to be collected from each of following KU rate classes will be determined on a total-revenues basis: RS Residential Service, VFD Volunteer Fire Department Service, AES All Electric School, ST. LT. Street Lighting Service, P.O. LT. Private Outdoor Lighting, LE Lighting Energy Service, TE Traffic Energy Service, DSK Dark Sky Friendly, and LEV Low Emission Vehicle Service.

**SECTION 5.04** Each utility's total ECR revenues from the remaining rate classes will be reallocated from the remaining rate schedules on the basis of non-fuel revenues (i.e., total revenues less fuel revenues). For purposes of Section 5.04, the ECR revenues allocated in the second step of the allocation process will be reallocated among the following LG&E rate classes on the basis of non-fuel revenues: GS General Service, PS Power Service, ITODS Industrial Time-of-Day Secondary Service, CTODS Commercial Time-of-Day Secondary Service, ITODP Industrial Time-of-Day Primary Service, CTODP Commercial Time-of-Day Primary Service, RTS Retail Transmission Service, FLS Fluctuating Load Service, GRP General Responsive Pricing Service, and special contracts. For purposes of Section 5.04, the ECR revenues allocated in the second step of the allocation process will be reallocated among the following KU rate classes on the basis of non-fuel revenues: GS General Service, PS Power Service, TODS Time-of-Day Secondary Service, TODP Time-of-Day Primary Service, RTS Retail Transmission Service, FLS Fluctuating Load Service, and special contracts.

**SECTION 5.05** Each utility will use the two-step ECR revenue allocation methodology described in Sections 5.01 through 5.04 unless prospectively changed by



future Commission orders. Each utility shall address the impact of this change in revenue allocation in the next two future environmental surcharge two-year reviews or ECR compliance plan proceedings and, if appropriate, present recommendations after consulting with the AG, KIUC, Kroger, and DOD/FEA.

**SECTION 5.06** If the Commission approves this Settlement Agreement, the Companies will forthwith submit evidence in Case Nos. 2011-00231 and 2011-00232 to effectuate the roll-in at issue in those proceedings consistent with Sections 5.01-5.04 of this Settlement Agreement, and will request that the Commission issue orders granting the appropriate relief by January 31, 2012. The Companies will continue to use the existing total revenue allocation methodology in the Companies' monthly ECR filings until the Commission issues orders in Case Nos. 2011-00231 and 2011-00232 to effectuate the base-rate roll-ins described above. The purpose of this provision is to effectuate the base-rate roll-ins consistent with the methodology contained in Sections 5.01-5.04.

#### **SECTION 6. Low-Income Items**

**SECTION 6.01** KU's and LG&E's shareholders will make two additional annual contributions totaling \$500,000 to the Companies' Home Energy Assistance ("HEA") programs, consisting of a shareholder contribution of \$250,000 in each of 2011 and 2012. These contributions will be split evenly between the KU and LG&E HEA Programs.

**SECTION 6.02** Effective January 1, 2012, the Companies' HEA charges will increase from 15 cents to 16 cents, and will remain at the 16-cent level until the next change in the Companies' base rates. The Companies estimate this 1-cent HEA charge

increase will produce \$115,000 of additional HEA funds each year. The proceeds resulting from this increase will be allocated consistent with LG&E's and KU's existing HEA Programs. Nothing in this Settlement Agreement precludes any party from seeking the continuation or expansion of the HEA Programs in any future proceeding.

**SECTION 6.03** The applications of LG&E and KU in these cases contain evidence supporting their positions that they are obligated to comply with the pending and impending regulations of the Environmental Protection Agency. The Attorney General cannot state, suggest, infer, or otherwise imply that LG&E and KU should fail to comply with the Environmental Protection Agency's regulations, which have been duly enacted after public participation in the rule-making process, regardless of any argument that the regulations are flawed or unfair.

#### **SECTION 7. Miscellaneous Provisions**

**SECTION 7.01** Each party waives all cross-examination of the other parties' witnesses unless the Commission disapproves this Agreement, and each party further stipulates and recommends that the Notice of Intent, Notice, Application, testimony, pleadings, and responses to data requests filed in this proceeding be admitted into the record. The parties stipulate that after the date of this Settlement Agreement they will not otherwise contest the Companies' proposals, as modified by this Settlement Agreement, in the hearing of the above-referenced proceedings regarding the subject matter of the Settlement Agreement, and that they will refrain from cross-examination of the Companies' witnesses during the hearing, except insofar as such cross-examination is in support of the Settlement Agreement.

**SECTION 7.02** The signatories hereto agree that making this Settlement Agreement shall not be deemed in any respect to constitute an admission by any party hereto that any computation, formula, allegation, assertion, or contention made by any other party in these proceedings is true or valid.

**SECTION 7.03** The signatories 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.

**SECTION 7.04** The signatories hereto agree that, following the execution of this Settlement Agreement, the signatories shall cause the Settlement Agreement to be filed with the Commission by November 10, 2011, together with a request to the Commission for consideration and approval of this Settlement Agreement.

**SECTION 7.05** The signatories hereto agree that this Settlement Agreement is subject to the acceptance of and approval by the Kentucky Public Service Commission. The signatories hereto further 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.

**SECTION 7.06** The signatories hereto agree that if the Commission does not accept and approve this Settlement Agreement in its entirety, then: (a) this Settlement Agreement shall be void and withdrawn by the parties hereto from further consideration by the Commission and none of the parties shall be bound by any of the provisions herein, provided that no party is precluded from advocating any position contained in this Settlement Agreement; and (b) neither the terms of this Settlement Agreement nor any

matters raised during the settlement negotiations shall be binding on any of the signatories to this Settlement Agreement or be construed against any of the signatories.

**SECTION 7.07** 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.

**SECTION 7.08** The signatories hereto agree that this Settlement Agreement shall inure to the benefit of, and be binding upon, the parties hereto and their successors and assigns.

**SECTION 7.09** The signatories hereto agree that this Settlement Agreement constitutes the complete agreement and understanding among the parties hereto, and any and all oral statements, representations, or agreements made prior hereto or contemporaneously herewith shall be null and void and shall be deemed to have been merged into this Settlement Agreement.

**SECTION 7.10** The signatories hereto agree that, for the purpose of this Settlement Agreement only, the terms of the Settlement Agreement 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.

**SECTION 7.11** The signatories 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 or an administrative action 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.

**SECTION 7.12** The signatories hereto warrant that they have informed, advised, and consulted with the respective parties hereto 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 the parties hereto.

**SECTION 7.13** The signatories 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.

**SECTION 7.14** The signatories hereto agree that this Settlement Agreement may be executed in multiple counterparts.

IN WITNESS WHEREOF, the parties have hereunto affixed their signatures:



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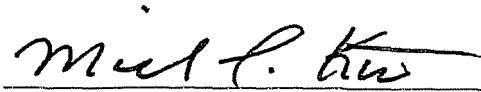
*Counsel for Kentucky Utilities Company  
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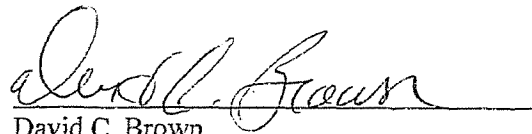
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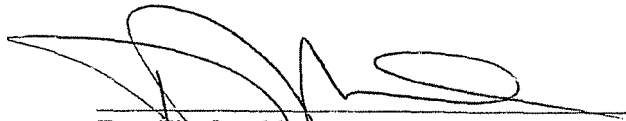
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A handwritten signature in cursive script, reading "David C. Brown", written over a horizontal line.

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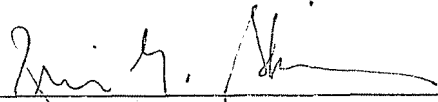
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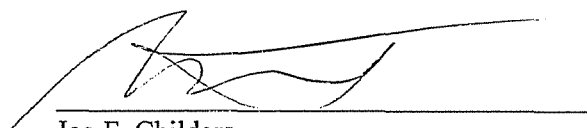
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APPENDIX B

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE  
COMMISSION IN CASE NO. 2011-00162 **DEC 15 2011**

**LOUISVILLE GAS AND ELECTRIC COMPANY  
2011 ENVIRONMENTAL COMPLIANCE PLAN**

Project	Air Pollutant or Waste/By-Product To Be Controlled	Control Facility	Generating Station	Environmental Regulation*	Environmental Permit*	Actual or Scheduled Completion	Actual (A) or Estimated (E) Projected Capital Cost (\$Million)
26	SO <sub>2</sub> , SO <sub>3</sub> , NO <sub>x</sub> , Hg and Particulate	Flue Gas Desulfurization, Baghouse with Powdered Activated Carbon Injection, SCR Turn-Down (Unit 3 & 4), and SCR upgrade (Unit 4), Sulfuric Acid Mist Mitigation	Mill Creek Unit 1	Clean Air Act (1990), NAAQS, HAPS and CATR	Title V Permit	2015	\$331.41 (E)
			Mill Creek Unit 2			2015	\$328.02 (E)
			Mill Creek Unit 3			2015	\$223.06 (E)
			Mill Creek Unit 4			2012-2014	\$385.73 (E)
27	NO <sub>x</sub> , Hg and Particulate	Baghouse with Powdered Activated Carbon Injection	Trimble County Unit 1	Clean Air Act (1990), HAPS and CATR	Title V Permit	2012	\$123.75 (E)
							<u>\$1,391.97</u>

\* Sponsored by Witness Revlett



**LOUISVILLE GAS AND ELECTRIC COMPANY  
2011 ENVIRONMENTAL COMPLIANCE PLAN**

Project	Air Pollutant or Waste/By-Product To Be Controlled	Control Facility	Generating Station	Estimated Annual Operations and Maintenance Costs (Through 2020)								
				2012	2013	2014	2015	2016	2017	2018	2019	2020
26	SO <sub>2</sub> , SO <sub>3</sub> , NO <sub>x</sub> , Hg and Particulate	Flue Gas Desulfurization, Baghouse with Powdered Activated Carbon Injection, SCR Turn-down (Unit 3 & 4), and SCR upgrade (Unit 4), Sulfuric Acid Mist Mitigation	Mill Creek Unit 1	\$ -	\$ -	\$ -	\$ 5,044,845	\$ 8,806,961	\$ 9,022,738	\$ 9,242,832	\$ 9,467,327	\$ 9,696,312
			Mill Creek Unit 2	\$ -	\$ -	\$ -	\$ 6,454,427	\$ 9,695,385	\$ 9,920,850	\$ 10,150,825	\$ 10,385,398	\$ 10,624,664
			Mill Creek Unit 3	\$ -	\$ 1,693,407	\$ 3,447,748	\$ 4,857,328	\$ 13,019,344	\$ 13,333,943	\$ 13,654,833	\$ 13,982,142	\$ 14,315,996
			Mill Creek Unit 4	\$ -	\$ -	\$ 3,631,737	\$ 15,519,305	\$ 15,881,381	\$ 16,250,699	\$ 16,627,402	\$ 17,011,640	\$ 17,403,563
27	NO <sub>x</sub> , Hg and Particulate	Baghouse with Powdered Activated Carbon Injection	Trimble County Unit 1	\$ -	\$ -	\$ -	\$ 3,732,365	\$ 7,614,024	\$ 7,766,305	\$ 7,921,631	\$ 8,080,064	\$ 8,241,665

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