

**PPL** companies

Ms. Gwen R. Pinson Executive Director Kentucky Public Service Commission 211 Sower Boulevard Frankfort, KY 40601

# RECEIVED

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March 2, 2018

PUBLIC SERVICE COMMISSION

# Re: The Application of PPL Corporation, E.ON AG, E.ON US Investments Corp., E.ON U.S. LLC, Louisville Gas and Electric Company and Kentucky Utilities Company for Approval of an Acquisition of Ownership and Control of Utilities Case No. 2010-00204

Dear Ms. Pinson:

Pursuant to the Commission's Order of September 30, 2010, in the abovereferenced proceeding, Regulatory Commitment No. 7, Louisville Gas and Electric Company ("LG&E") and Kentucky Utilities Company ("KU") (collectively "the Companies") hereby files its Amended and Restated Power Supply System Agreement (Attachment 1) and the Amended and Restated Transmission Coordination Agreement (Attachment 2) (collectively "the Agreements").

Also, pursuant to Section 205 of the Federal Power Act<sup>1</sup> and Part 35 of the Rules of Practice and Procedure of the FERC,<sup>2</sup> the Companies will be submitting the Agreements for filing with the FERC in April 2018. The Companies are submitting the Agreements in order to reflect certain ministerial changes.

Specifically, the Power Supply System Agreement ("PSSA") provides the contractual basis for the coordinated planning, construction, operation and maintenance of the electric generation facilities of the Companies to achieve

#### LG&E and KU Energy LLC

State Regulation and Rates 220 West Main Street PO Box 32010 Louisville, Kentucky 40232 www.lge-ku.com

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<sup>&</sup>lt;sup>1</sup> 16 U.S.C. § 824d.

<sup>&</sup>lt;sup>2</sup> 18 C.F.R. Part 35.

Ms. Gwen R. Pinson March 2, 2018

optimal economies, consistent with reliable electric service and environmental requirements. First, the responsibility for administration and oversight of the PSSA now rests with the companies' senior-most Companies officer with direct or indirect responsibility or oversight for power supply and generation dispatch functions (or such-officer's designee). The senior-most officer will now act as chairperson of the Coordinating Committee (as reflected in Section 4.1 of the agreement) and is also the signatory of the agreement for each company.

Second, since initial effectiveness of the PSSA in 1998, a number of updates to definitions and clarifications to Article VII: Off-System Capacity and Energy Sales and Purchases of the Agreement were necessary to reflect current pre and post-merger Off-System Capacity and Energy Sales and Purchases. For the avoidance of doubt, the Companies proposed change will not impact any charges as it only updates the reflection of current Off-System Capacity and Energy Sales and Purchases.

Specifically, the Transmission Coordination Agreement ("TCA") establishes the terms and conditions pursuant to which LG&E/KU operate their transmission systems as a single, integrated system. First, the responsibility for administration and oversight of the TCA now rests with the Companies' senior-most officer with direct or indirect responsibility or oversight for power supply and generation dispatch functions (or such-officer's designee). The senior-most officer will now act as chairperson of the Coordinating Committee (as reflected in Section 4.1 of the agreement) and is also the signatory of the agreement for each company.

Second, as noted above, the Companies allocate certain transmission-related costs and revenues between the companies pursuant to formulas. The formulas are contained in Schedules A and B of the TCA, and use inputs from the companies' FERC Form 1's to update the companies' respective allocations on an annual basis. Schedules A and B also contain examples demonstrating how the formulas work with FERC Form 1 inputs; For the avoidance of doubt, the Companies are not proposing changes to the cost/revenue allocation formulas themselves. The Companies have only updated the examples with more recent FERC Form 1 inputs as a means of showing how the formulas will be applied. LG&E/KU further note that the cost/revenue allocation formulas do not impact transmission service rates charged under the LG&E/KU OATT; as noted above, service provided under the OATT is provided on a single-system basis.

Ms. Gwen R. Pinson March 2, 2018

Please confirm your receipt of this filing by placing the File Stamp of your Office with date received on the enclosed additional filing letter. Should you have any questions regarding this information, please do call me or Don Harris (502) 627-2021.

Sincerely, Rick E. Lovekamp

# Attachment 1

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Amended and Restated Power Supply System Agreement March 2, 2018

# AMENDED AND RESTATED

# POWER SUPPLY SYSTEM AGREEMENT

Between

Louisville Gas and Electric Company

And

Kentucky Utilities Company

March 2, 2018

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# AMENDED AND RESTATED

# POWER SUPPLY SYSTEM AGREEMENT

#### Between

### Louisville Gas and Electric Company

and

### Kentucky Utilities Company

THIS AMENDED AND RESTATED POWER SUPPLY SYSTEM AGREEMENT, hereinafter called "Agreement," is made and entered into as of the 2nd day of March, 2018 by and between Louisville Gas and Electric Company ("LG&E"), and Kentucky Utilities Company ("KU"), hereinafter separately referred to as "Company" and jointly as "Companies."

WHEREAS, LG&E and KU are the owners and operators of interconnected generation, transmission, and distribution facilities with which they are engaged in the business of generating, transmitting, and selling electric Capacity and Energy to the general public, to other entities, and to other electric utilities; and

WHEREAS, in 1998 LG&E's holding company parent, LG&E Energy Corp., and KU's holding company parent, KU Energy Corporation, merged, pursuant to which LG&E and KU became wholly-owned subsidiaries of an entity whose successor is now known as LG&E and KU Energy LLC ("LKE");

WHEREAS, the Companies entered into a Power Supply System Agreement, dated May 4, 1998, which set forth the terms to achieve economic benefits for their customers through operation as a single interconnected and centrally dispatched system and through coordinated planning, construction, operation and maintenance of their electric supply facilities;

WHEREAS, since the merger LG&E and KU have been operating as a single interconnected and centrally dispatched system and through coordinated planning, construction, operation, and maintenance of their electric supply facilities;

WHEREAS, due to certain changes since 1998 the Power Supply System Agreement needs to be updated and modified to reflect current operations;

NOW, THEREFORE, the Companies mutually agree as follows:

# **ARTICLE I**

# TERM OF AGREEMENT

#### 1.1 Effective Date

This Agreement shall become effective upon the later of March 2, 2018, or such date as established by the Federal Energy Regulatory Commission. This Agreement shall continue in force and effect from the effective date hereinabove described, and continue from Year to Year thereafter until terminated by either Company.

### 1.2 <u>Periodic Review</u>

This Agreement will be reviewed periodically by the Operating Committee, as defined herein, to determine whether revisions are necessary to meet changing conditions. In the event that revisions are made by the Companies pursuant to Section 10.8, and after requisite approval or acceptance for filing by the appropriate regulatory authorities, the Operating Committee will thereafter, for the purpose of ready reference to a single document, prepare for distribution to the Companies an amended document reflecting all changes in and additions to this Agreement with notations thereon of the date amended.

# **ARTICLE II**

# DEFINITIONS

For purposes of this Agreement, the following definitions shall apply:

- 2.1. <u>Agreement shall mean this Agreement including all attachments and schedules applying</u> thereto and any amendments made hereafter.
- 2.2. <u>Ancillary Services</u> shall mean those services that are necessary to support the transmission of Capacity and Energy from resources to loads while maintaining reliable operation of the Companies' Transmission System in accordance with Good Utility Practice.
- 2.3. <u>Capacity</u> shall be expressed in megawatts (MW).
- 2.4. <u>Company Demand</u> shall mean the demand in megawatts of all retail and wholesale power customers on whose behalf the Company, by statute, franchise, regulatory requirement, or contract, has undertaken an obligation to construct and operate its power supply system to meet the reliable electric needs of such customers, integrated over a period of one Hour, plus the losses incidental to that service.
- 2.5. <u>Company Load Responsibility</u> shall be as follows:
  - (a) Company Peak Demand; less
  - (b) Interruptible load including direct load control included in (a) above; plus
  - (c) The contractual amount of sales and exchanges including applicable reserves during the period to other systems; less
  - (d) The contractual amount of purchases and exchanges including applicable reserves during the period from other systems.
- 2.6. <u>Company Operating Capability</u> shall mean the dependable net Capacity in megawatts of Generating Units of a Company carrying load or ready to take load plus firm purchases and exchanges acquired by such Company.
- 2.7. <u>Company Peak Demand</u> for a period shall be the highest Company Demand for any Hour during the period.
- 2.8. <u>Economic Dispatch</u> shall mean the distribution of total energy requirements among Power Supply Resources for System economic efficiency with due consideration of incremental generating costs, incremental transmission losses, and System security.
- 2.9. Energy shall be expressed in megawatt-hours (MWH).
- 2.10. <u>Generating Unit</u> shall mean an electric generator, together with its prime mover and all auxiliary and appurtenant devices and equipment designed to be operated as a unit for the production of electric Capacity and Energy.
- 2.11. <u>Good Utility Practice</u> shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.
- 2.12. Hour shall mean a clock-hour.

- 2.13. <u>Incremental Energy Cost</u> shall mean the Variable Cost which a selling Company incurs in order to supply the next unit of Energy.
- 2.14. <u>Internal Economy Energy</u> shall mean the Energy supplied and sold by one Company to another Company to enable the purchasing Company to meet a portion of its Own Load at less cost than from its other Power Supply Resources.
- 2.15. Joint Unit shall mean any Generating Unit jointly owned, if any, by the Companies.
- 2.16. <u>LG&E-KU Open Access Transmission Tariff</u> shall mean the LG&E-KU Open Access Transmission Tariff filed with the Federal Energy Regulatory Commission on behalf of the Companies as it may be amended from time to time.
- 2.17. <u>Margin</u> for a given period shall mean the sum of the amounts developed in accordance with Section 2.17.
- 2.18. <u>Margin on Energy Sales</u> shall mean the difference between: (1) the revenue from offsystem Energy sales and (2) the selling Company's Incremental Energy Cost incurred in making such sales.
- 2.19. <u>Month</u> shall mean a calendar month consisting of the applicable 24-Hour periods as measured by Eastern Standard Time.
- 2.20. <u>Operating Committee</u> shall mean the organization established pursuant to Section 4.1 whose duties are more fully set forth herein.
- 2.21. <u>Own Load</u> shall mean Energy required to meet Company Demand plus Energy associated with sales or exchanges with reserves less Energy associated with purchases or exchanges with reserves.
- 2.22. <u>Power Supply Control Center</u> shall mean a center operated by the Companies for the optimal utilization of both Companies' Power Supply Resources for the supply of Capacity and Energy.
- 2.23. <u>Power Supply Resources</u> shall mean all Energy and Capacity supply resources available to a Company.
- 2.24. System shall mean the coordinated electric generation facilities of the Companies.
- 2.25. System Demand shall mean the sum in megawatts of both Company's clock-hour Demand.
- 2.26. <u>Transmission System</u> shall be the facilities owned, controlled or operated by the Companies that are used to provide transmission service under the LG&E-KU Open Access Transmission Tariff.
- 2.27. <u>Variable Cost</u> shall be a Company's incremental generation or purchased Energy cost.
- 2.28. Year shall be a calendar year.

# ARTICLE III

# **OBJECTIVES**

# 3.1. <u>Purpose</u>

The purpose of this Agreement is to provide the contractual basis for the coordinated planning, construction, operation and maintenance of the System to achieve optimal economies, consistent with reliable electric service and environmental requirements.

# **ARTICLE IV**

# **OPERATING COMMITTEE**

### 4.1. <u>Operating Committee</u>

The Operating Committee is the organization established to ensure the coordinated operation of the System. The Operating Committee members shall include at least one member from LG&E and at least one member from KU who are not members of the Coordinating Committee established under the Transmission Coordination Agreement. The chairperson, who shall be the senior-most LKE officer (below the Chairman and/or President) with direct or indirect responsibility or oversight for power supply and generation dispatch functions (or such-officer's designee), shall appoint the member representative(s) of LG&E and KU. Other than the chairperson, there shall be the same number of members representing each Company. Nothing herein shall preclude a member from holding a title with, or performing functions for, both LG&E and KU, whether relating to Operating Committee activities or otherwise. Operating Committee decisions shall be by a majority vote of those present. However, any member not present may vote by proxy. The chairperson shall vote only in case of a tie.

# 4.2. <u>Responsibilities of the Operating Committee</u>

The Operating Committee shall be responsible for overseeing:

- (a) coordinated planning of the Companies' Power Supply Resources;
- (b) the design, construction, operation and maintenance of the Power Supply Control Center; and
- (c) the Economic Dispatch of the System by the Power Supply Control Center and the provision of generation-based Ancillary Services by the Companies.
- 4.3. <u>Delegation and Acceptance of Authority</u>

The Companies hereby delegate to the Operating Committee, and the Operating Committee hereby accepts, responsibility and authority for the duties listed in this Article and elsewhere in this Agreement.

4.4. <u>Reporting</u>

The Operating Committee shall provide periodic summary reports of its activities under this Agreement to the Companies and shall keep the Companies informed of situations or problems that may materially affect the outcome of these activities. Furthermore, the Operating Committee agrees to report to the Companies in such additional detail as is requested regarding specific issues or projects under its oversight.

# 4.5. Expenses

All expenses incurred by the Operating Committee in the performance of its responsibilities shall be settled in accordance with arrangements made by the Companies for services provided between or on behalf of the Companies.

# **ARTICLE V**

### **GENERATION PLANNING**

### 5.1. Generation Planning

The Companies agree that additions to Company Operating Capability shall be planned and developed on the basis that their combined individual systems constitute an integrated electric system and that the objective of their planning shall be to maximize the economy, efficiency and reliability of the System as a whole. In this connection, the Operating Committee will from time to time, as it deems appropriate, direct studies for Power Supply Resource planning purposes. If the Companies agree to participate in Joint Units, such Joint Units shall be owned in accordance with Schedule A.

# **ARTICLE VI**

# **COORDINATED OPERATION**

### 6.1. Operation of the Combined System

The System shall be operated in accordance with Economic Dispatch in order to economically meet the Company Load Responsibility of each Company and its off-System sales obligations, through the coordinated economic commitment and dispatch of the Companies' Power Supply Resources, consistent with Good Utility Practice.

# 6.2. Communications Facilities and Other Facilities

The Companies shall provide communications, metering and other facilities necessary for the metering and control of the Generating Units. Each Company shall be responsible for any expenses it incurs for the installation, operation and maintenance of such facilities at its own Generating Units. Any expenses incurred due to facilities required at or for the Power Supply Control Center to operate the System shall be settled in accordance with the arrangements made by the Companies for compensation for services provided between and on behalf of the Companies.

# **ARTICLE VII**

# **OFF-SYSTEM CAPACITY AND ENERGY SALES AND PURCHASES**

### 7.1. <u>Revenues From Off-System Capacity Sales</u>

Demand and Energy charge revenues collected from off-System Capacity sales shall be reduced by any demand charges from off-System purchases, if any, dedicated to supply the sale. The net amount of revenue shall inure to the Company providing the Capacity for the sale.

# 7.2. Charges for Pre-Merger Off-System Capacity Purchases

Demand and Energy charges for off-System Capacity purchases under purchase agreements entered into prior to May 4, 1998, shall remain the responsibility of the Company contracting for the purchase.

# 7.3. Charges for Post-Merger Off-System Capacity Purchases

Demand charges for off-System Capacity purchases under purchase agreements entered into after May 4, 1998, made to enable both Companies to reliably and economically meet their Company Load Responsibility shall be assigned to the Companies based on the ratio of the Company Load Responsibility of each Company to the sum of the Company Load Responsibility for both Companies for the appropriate time period.

# 7.4. Energy Sales and Purchases Off-System

The Operating Committee will assure the efficient utilization of Company Operating Capability for off-System sales of Energy available after meeting all of the requirements of the System including the Energy associated with contractual requirements for off-System Capacity sales. Any off-System economy Energy purchases or sales shall be implemented by decremental or incremental System Economic Dispatch as appropriate. Any Margin on Energy Sales to off-System entities shall be distributed to the Companies based on the amount of Energy purchases from off-System entities shall be allocated to the Companies based on the amount of Energy purchases from off-System entities shall be allocated to the Companies based on the amount of Energy replaced for each Company, in accordance with Schedule B.

# ARTICLE VIII

# INTER-COMPANY ENERGY EXCHANGES AND CAPACITY PURCHASES

# 8.1. <u>Energy Exchanges Between the Companies</u>

The Power Supply Control Center shall direct the scheduling of System Energy output pursuant to guidelines established by the Operating Committee to obtain the lowest cost of Energy for serving System Demand consistent with each Company's operating and security constraints, including voltage control, stability, loading of facilities, operating guides as approved by the Operating Committee, fuel commitments, environmental requirements, and continuity of service to customers.

# 8.2. <u>Energy Exchange Pricing</u>

For purposes of pricing Energy exchange between the Companies, Power Supply Resources shall be utilized in the following order:

- (a) The portion of output of a Generating Unit that is designated not to be operated in the order of lowest to highest Variable Cost due to Company operating constraints shall be allocated to the Company requiring such output;
- (b) The lowest Variable Cost generation from each Company's Operating Capability remaining after the requirements in (a) have been met shall first be allocated to serve its Own Load;
- (c) The next lowest Variable Cost portion of each Company's Operating Capability remaining after the requirements in (a) and (b) have been met shall be allocated to serve Internal Economy Energy requirements of the Companies under System Economic Dispatch; and
- (d) The next lowest Variable Cost portion of each Company's Operating Capability remaining after the requirements of (a), (b), and (c) have been met shall be available for off-System Energy sales.

Internal Economy Energy shall be priced in accordance with Schedule C.

# **ARTICLE IX**

# **POWER SUPPLY CONTROL CENTER**

### 9.1. <u>Power Supply Control Center</u>

The Operating Committee shall oversee the operation of a Power Supply Control Center adequately equipped and staffed to meet the requirements of the Companies for efficient, economical and reliable operation as contemplated by this Agreement.

# 9.2. Expenses

All expenses for operation of the Power Supply Control Center shall be billed monthly to each Company, in accordance with Schedule D.

# **ARTICLE X**

# GENERAL

#### 10.1. <u>Regulatory Authorization</u>

This Agreement is subject to certain regulatory approvals and the Companies shall diligently seek all necessary regulatory authorization for this Agreement.

### 10.2. Effect on Other Agreements

This Agreement shall not modify the obligations of either Company under any agreement between such Company and others not parties to this Agreement in effect at the date of this Agreement.

### 10.3. Schedules

The basis of compensation for the use of facilities and for the Capacity and Energy provided or supplied by a Company to the other Company under this Agreement shall be in accordance with arrangements agreed upon from time to time between the Companies, each of which, when signed by the parties thereto and approved or accepted for filing by the appropriate regulatory authority, shall become a part of this Agreement.

#### 10.4. Measurements

All quantities of Capacity and Energy exchanged or flowing between the systems of the Companies, shall be determined by meters installed at each interconnection, unless otherwise agreed to by the Companies.

# 10.5. <u>Billing</u>

Bills for services rendered hereunder shall be calculated in accordance with applicable Schedules, and shall be issued on a Monthly basis for services performed during the preceding Month.

### 10.6. <u>Waivers</u>

Any waiver at any time by a Company of its rights with respect to a default by the other Company under this Agreement shall not be deemed a waiver with respect to any subsequent default of similar or different nature.

# 10.7. Successors and Assigns; No Third Party Beneficiary

This Agreement shall inure to and be binding upon the successors and assigns of the respective Companies, but shall not be assignable by either Company without the written consent of the other Company, except upon foreclosure of a mortgage or deed of trust.

Nothing expressed or mentioned or to which reference is made in this Agreement is intended or shall be construed to give any person or corporation other than the Companies any legal or equitable right, remedy or claim under or in respect of this Agreement or any provision herein contained, expressly or by reference, or any Schedule hereto, this Agreement, any such Schedule and any and all conditions and provisions hereof and thereof being intended to be and being for the sole and exclusive benefit of the Companies, and for the benefit of no other person or corporation.

# 10.8. Amendment

It is contemplated by the Companies that it may be appropriate from time to time to change, amend, modify or supplement this Agreement or the schedules which are attached to this Agreement, to reflect changes in operating practices or costs of operations or for other reasons. This Agreement may be changed, amended, modified or supplemented by an instrument in writing executed by the Companies after requisite approval or acceptance for filing by the appropriate regulatory authorities.

# 10.9. Independent Contractors

By entering into this Agreement the Companies shall not become partners, and as to each other and to third persons, the Companies shall remain independent contractors in all matters relating to this Agreement.

### 10.10. Responsibility and Liability

The liability of the Companies shall be several, not joint or collective. Each Company shall be responsible only for its obligations, and shall be liable only for its proportionate share of the costs and expenses as provided in this Agreement, and any liability resulting hereto from. Each Company will defend, indemnify, and save harmless the other Company hereto from and against any and all liability, loss, costs, damages, and expenses, including reasonable attorney's fees, caused by or growing out of the gross negligence, willful misconduct, or breach of this Agreement by such indemnifying Company.

IN WITNESS WHEREOF, each Company has caused this Agreement to be executed and attested by their duly authorized officers on the day and year first above written.

LOUISVILI GAS AND ELECTRIC COMPANY By: ie E. Bellin Name: SUP Title: Ops

KY UTILITIES COMPANY KEN By lar onnie E. Bei Name: SUP Title:

#### SCHEDULE A

#### JOINT UNIT

#### 1. Purpose

The purpose of this Schedule is to provide the basis for the Companies' participation in Joint Units.

#### 2. Ownership

- (a) Every Joint Unit shall be owned by the Companies as tenants in common. Ownership shares in each Joint Unit shall be allocated by the Operating Committee prior to the time the unit is authorized thru the Capital and Investment Review Policy (or successor policy) of LG&E and KU Energy LLC. However, each Company shall own at least 25 megawatts of each Joint Unit unless otherwise agreed to by the Operating Committee. Each Company shall be responsible for its pro-rata share of the costs of construction of the unit and shall contribute such funds when billed.
- (b) When a new Joint Unit is installed at a site already occupied by one or more existing (i.e., pre-merger) Generating Units, the Operating Committee shall identify any existing facilities that will be common to the new Joint Unit and the existing Generating Unit(s) and the portion of the common facilities to be allocated to the new Joint Unit. The Company owning the existing common facilities shall be compensated for the use of those common facilities.

	1110	A	TRIC COMPA	NY
By:	TIME	Bell	w	_
Name:	Lonnie	e E.B	ellar	
Title:	SVP	Ops		

	Man Elle	
Name:	Lonnie E. Bellar	
Title:	SUP Ops	

#### **SCHEDULE B**

# DISTRIBUTION OF MARGIN FOR OFF-SYSTEM SALES AND COST FOR ENERGY PURCHASES

#### 1. Purpose

The purpose of this Schedule is to establish the basis for distributing between the Companies the cost of Energy purchases and the Margin on Energy Sales of off-System Energy.

#### 2. Off-System Energy Purchases

Any cost for Energy purchases of off-System Energy during an Hour shall be allocated to the Companies in proportion to the megawatt-hours of Energy replaced for each Company during the Hour as a result of the purchases.

#### 3. Off-System Energy Sales

Any Margin on Sales of off-System Energy during an Hour shall be distributed to the Companies in proportion to the Energy generated by each Company for such sales unless such Energy was generated for off-System Sales as a result of a Company's purchase of Internal Economy Energy pursuant to Schedule C, in which case the Margin from such sales shall inure to the benefit of the Company furnishing the Internal Economy Energy.

LOUISVI	LLE GAS AND ELECTRIC COMPAN	VY
By:	You E Belle	
Name:	Lonnie E. Bellar	
Title:	SUP OPS	

By: Mom EBellu	
Name: Lonnie E. Bellar	
Title: SUP Ops	

#### SCHEDULE C

# PAYMENTS AND RECEIPTS FOR INTERNAL ECONOMY ENERGY EXCHANGES BETWEEN THE COMPANIES

### 1. Purpose

The purpose of this Schedule is to provide the basis for determining payments and receipts between the Companies for Internal Economy Energy exchanges.

### 2. <u>Hourly Calculations</u>

The payments and receipts of Section 3 of this Schedule are calculated Hourly, but are accumulated and billed Monthly between the Companies.

### 3. Payments and Receipts

The purchasing Company shall pay, and the selling Company shall receive, an amount based on the incremental fuel cost of the selling Company plus one half of the difference between the incremental fuel cost of the selling Company and the avoided fuel cost of the purchasing Company.

	LLE GAS AND ELECTRIC COMPANY
By:	Min E Bellu
Name:	Lonnie E. Bellar
Title:	SUP Ops

By: AME Belli			
	Lonnie E. Bellar		
Title:	SUPORS		

#### SCHEDULE D

# DISTRIBUTION OF OPERATING EXPENSES OF THE POWER SUPPLY CONTROL CENTER

### 1. Purpose

The purpose of this Schedule is to provide a basis for the distribution between the Companies of the costs incurred in operating the Power Supply Control Center.

# 2. <u>Costs</u>

Costs for the purpose of this Schedule shall include all costs incurred in maintaining and operating the Power Supply Control Center including, among others, such items as salaries, wages, rentals, the cost of materials and supplies, interest, taxes, depreciation, transportation, travel expenses, consulting, and other professional services.

#### 3. Distribution of Costs

All costs other than those relating to a special service or study shall be billed to the Companies in proportion to all firm kilowatt hour electric sales made by each Company for the preceding Year. In the event the Power Supply Control Center performs a special service or study in which both Companies are not proportionately interested, any resulting cost shall be distributed as agreed to by the Companies.

	GAS AND	
By:	WEL	Seller E. Bellare
Name: Lo	onnie E	E. Bellar
Title:	SUP E	Dps
	0	TIES COMPANY
By: Au	WEI	Sellar E. Bellar
Name: Lo	nnie E	E. Bellar
Title:	SUP C	PS

Attachment 2

Amended and Restated Transmission Coordination Agreement March 2, 2018

# AMENDED AND RESTATED TRANSMISSION COORDINATION AGREEMENT

Between

Louisville Gas and Electric Company

and

Kentucky Utilities Company

March 2, 2018

# AMENDED AND RESTATED TRANSMISSION COORDINATION AGREEMENT

### Between

# Louisville Gas and Electric Company

#### and

# **Kentucky Utilities Company**

THIS AMENDED AND RESTATED TRANSMISSION COORDINATION AGREEMENT, hereinafter called "Agreement," is made and entered into as of the 2<sup>nd</sup> day of March 2018 by and between Louisville Gas and Electric Company ("LG&E"), and Kentucky Utilities Company ("KU"), hereinafter separately referred to as "Company" and jointly as "Companies."

WHEREAS, LG&E and KU are the owners and operators of interconnected generation, transmission and distribution facilities with which they are engaged in the business of transmitting and selling electric power to the general public, to other entities and to other electric utilities; and

WHEREAS, in 1998 LG&E's holding company parent, LG&E Energy Corp., and KU's holding company parent, KU Energy Corporation, merged, pursuant to which LG&E and KU became a wholly-owned subsidiary of an entity whose successor is now known as LG&E and KU Energy LLC ("LKE");

WHEREAS, the Companies entered into a Transmission Coordination Agreement, dated October 9, 1997, which set forth the terms for the coordinated planning, operation and maintenance of their transmission facilities;

WHEREAS, since the merger LG&E and KU have been operating as a single interconnected and coordinated Transmission System pursuant to the Transmission Coordination Agreement;

WHEREAS, the Transmission Coordination Agreement was amended on July 2, 2013 and now needs to be further amended be updated and modified to reflect current operations;

NOW, THEREFORE, the Companies mutually agree as follows:

# ARTICLE I TERM OF AGREEMENT

# 1.1 Effective Date

This Agreement shall become effective upon the later of March 2, 2018, or such date as approved by the Federal Energy Regulatory Commission. This Agreement shall continue in force and effect from the effective date hereinabove described, and continue from Year to Year thereafter until terminated by either Company.

# 1.2 <u>Periodic Review</u>

This Agreement will be reviewed periodically by the Coordinating Committee, as defined herein, or by the Companies in their individual capacities to determine whether revisions are necessary to meet changing conditions. In the event that revisions are made by the Companies pursuant to Section 8.5, and after requisite approval or acceptance for filing by the appropriate regulatory authorities, the Coordinating Committee will thereafter, for the purpose of ready reference to a single document, prepare for distribution to the Companies an amended document reflecting all changes in and additions to this Agreement with notations thereon of the date amended.

# ARTICLE II

# DEFINITIONS

For purposes of this Agreement, the following definitions shall apply:

2.1 <u>Agreement</u> shall mean this Agreement including all attachments and schedules applying thereto and any amendments made hereafter.

2.2 <u>Ancillary Services</u> shall mean those services that are necessary to support the transmission of capacity and energy from resources to loads while maintaining reliable operation of the Companies' Transmission System in accordance with Good Utility Practice.

2.3 <u>Balancing Authority</u> shall mean the responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time.

2.4 <u>Balancing Authority Area</u> shall mean the collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains load-resource balance within this area.

2.5 <u>Designated Agent</u> shall mean any entity that performs actions or functions on behalf of the Transmission Provider, an Eligible Customer, or the Transmission Customer required under the LG&E-KU Open Access Transmission Tariff.

2.6 <u>Direct Assignment Facilities</u> shall mean facilities or portions of facilities that are constructed by the Transmission Provider for the sole use/benefit of a particular Transmission Customer requesting service under the LG&E-KU Open Access Transmission Tariff.

2.7 <u>Month shall mean a calendar month consisting of the applicable 24-hour periods as</u> measured by Eastern Standard Time.

2.8 <u>LG&E-KU Open Access Transmission Tariff</u> shall mean the LG&E-KU Open Access Transmission Tariff filed with the Federal Energy Regulatory Commission on behalf of the Companies as it may be amended from time to time.

2.9 <u>Point-to-Point Transmission Service</u> shall mean service provided under Part II of the LG&E-KU Open Access Transmission Tariff.

2.10 <u>Scheduling, System Control and Dispatch Service</u> shall mean the service required to schedule the movement of power through, out of, within, or into a Balancing Authority Area, as specified in Schedule 1 of the LG&E-KU Open Access Transmission Tariff.

2.11 <u>Transmission Customer</u> shall mean any Eligible Customer as defined in the LG&E-KU Open Access Transmission Tariff (or its Designated Agent) that (i) executes a Service Agreement, or (ii) requests in writing that the Transmission Provider file with the Federal Energy Regulatory Commission, a proposed unexecuted Service Agreement to receive Transmission Service under Part II of the LG&E-KU Open Access Transmission Tariff. This term is used in the Part I Common Service Provisions of the LG&E-KU Open Access Transmission Tariff to include customers receiving service under Part II and Part III of the LG&E-KU Open Access Transmission Tariff.

2.12 <u>Transmission Provider</u> shall mean the Transmission System Operator (or its Designated Agent).

2.13 <u>Transmission Service</u> shall mean service provided under Part II and Part III of the LG&E-KU Open Access Transmission Tariff on a firm and non-firm basis.

2.14 <u>Transmission System</u> shall mean the facilities owned, controlled or operated by the Companies that are used to provide service under the LG&E-KU Open Access Transmission Tariff.

2.15 <u>Transmission System Operator</u> shall mean the organization described in Article VI of this Agreement.

# ARTICLE III OBJECTIVES

### 3.1 <u>Purpose</u>

The purpose of this Agreement is to provide the contractual basis for the coordinated planning and operation of the Transmission System to achieve optimal economies, consistent with reliable electric service and environmental requirements.

# ARTICLE IV COORDINATING COMMITTEE

# 4.1 <u>Coordinating Committee</u>

The Coordinating Committee is the organization established to oversee planning, construction, operation, and maintenance of the Transmission System. The Coordinating Committee members shall include at least one member from LG&E and at least one member from KU who are not members of the Operating Committee established under the Power Supply System Agreement. The chairperson, who shall be the senior-most LKE officer (below the Chairman and/or President) with direct or indirect responsibility or oversight for transmission operations (or such-officer's designee), shall appoint the member representative(s) of LG&E and KU. Other than the chairperson, there shall be the same number of members representing each Company. Nothing herein shall preclude a member from holding a title with, or performing functions for, both LG&E and KU, whether relating to Operating committee activities or otherwise. Coordinating Committee decisions shall be by a majority vote of those present. However, any member not present may vote by proxy. The chairperson shall vote only in case of a tie.

# 4.2 Responsibilities of the Coordinating Committee

The Coordinating Committee shall be responsible for overseeing:

(a) the Companies in the coordinated planning of the Transmission System, including studies for transmission planning purposes; and

(b) compliance with the terms of the LG&E-KU Open Access Transmission Tariff and the rules and regulations of the Federal Energy Regulatory Commission relating thereto.

# 4.3 Delegation and Acceptance of Authority

The Companies hereby delegate to the Coordinating Committee, and the Coordinating Committee hereby accepts, responsibility and authority for the duties listed in this Article and elsewhere in this Agreement.

# 4.4 Reporting

The Coordinating Committee shall provide periodic summary reports of its activities under this Agreement to the Companies and shall keep the Companies informed of situations or problems that may materially affect the outcome of these activities. Furthermore, the Coordinating Committee agrees to report to the Companies in such additional detail as is requested regarding specific issues or projects under its oversight.

# 4.5 <u>Expenses</u>

All expenses incurred by the Coordinating Committee in the performance of its responsibilities shall be settled in accordance with arrangements made by the Companies for services provided between or on behalf of the Companies.

### ARTICLE V PLANNING

# 5.1 Transmission Planning

The Companies agree that their transmission facilities shall be planned and developed on the basis that their combined individual systems constitute an integrated Transmission System and that the objective of their planning shall be to maximize the economy, efficiency and reliability of the Transmission System as a whole. In this connection, the Transmission System Operator will from time to time, as it deems appropriate, direct studies for transmission planning purposes.

### ARTICLE VI TRANSMISSION

# 6.1 Delegation to the Transmission System Operator

(a) The Companies shall delegate to the Transmission System Operator the responsibility and authority to act as Transmission Provider on behalf of the Companies for all of the requirements and purposes of the LG&E-KU Open Access Transmission Tariff.

(b) Expenses of the Transmission System Operator shall be recovered from the Companies, in accordance with Schedule A. To recover these costs, the Companies may include costs incurred by the Transmission System Operator in the transmission revenue requirement and in their rates for Ancillary Services in future rate filings.

# 6.2 <u>Transmission Facilities</u>

Each Company shall make its Transmission System available to the Transmission System Operator.

# 6.3 Transmission Service Revenues

(a) The Companies shall share transmission service revenues obtained from the use of the transmission facilities that comprise the Transmission System as shown on Schedule B.

(b) Revenues received for third-party use of Direct Assignment Facilities shall be distributed to the Company(ies) owning such facilities.

(c) The distribution to the Companies of revenues received for stranded costs or new transmission facilities received from third-party customers under the LG&E-KU Open Access Transmission Tariff shall be determined on a case-by-case basis.

# 6.4 Costs for Point-to-Point Transmission Service for Third Party Sales

The cost of Transmission Service for Third Party Sales shall be allocated to each Company as determined by the results of the After the Fact Billing (AFB) program. The AFB program's primary function is the allocation of energy production costs for the Network Load of each Company and off-system sales. Each Company's portion of Point-to-Point Transmission costs for Third Party Sales shall be a ratio of that Company's resources assigned to Third Party Sales by the AFB program divided by the total Third Party Sales.

# ARTICLE VII ANCILLARY SERVICES

# 7.1 Ancillary Services

(a) Each Company shall make available Ancillary Services as required by the LG&E-KU Open Access Transmission Tariff.

(b) Revenues received for Ancillary Services will be allocated between the Companies in accordance with Schedule B.

# ARTICLE VIII GENERAL

# 8.1 Regulatory Authorization

This Agreement is subject to certain regulatory approvals and the Companies shall diligently seek all necessary regulatory authorization for this Agreement.

# 8.2 Effect on Other Agreements

This Agreement shall not modify the obligations of either Company under any agreement between such Company and others not parties to this Agreement in effect on the effective date of this Agreement.

# 8.3 Waivers

Any waiver at any time by a Company of its rights with respect to a default by the other Company under this Agreement shall not be deemed a waiver with respect to any subsequent default of similar or different nature.

# 8.4 Successors and Assigns; No Third Party Beneficiary

This Agreement shall inure to and be binding upon the successors and assigns of the respective Companies, but shall not be assignable by either Company without the written consent of the other Company, except upon foreclosure of a mortgage or deed of trust. Nothing expressed or mentioned or to which reference is made in this Agreement is intended or shall be construed to give any person or corporation other than the Companies any legal or equitable right, remedy or claim under or in respect of this Agreement or any provision herein contained, expressly or by reference, or any schedule hereto, this Agreement, any such schedule and any and all conditions and provisions hereof and thereof being intended to be and being for the sole exclusive benefit of the Companies, and for the benefit of no other person or corporation.

# 8.5 <u>Amendment</u>

It is contemplated by the Companies that it may be appropriate from time to time to change, amend, modify or supplement this Agreement or the schedules that are attached to this Agreement, to reflect changes in operating practices or costs of operations or for other reasons. This Agreement may be changed, amended, modified or supplemented by an instrument in writing executed by all of the Companies after requisite approval or acceptance for filing by the appropriate regulatory authorities.

# 8.6 Independent Contractors

By entering into this Agreement the Companies shall not become partners, and as to each other and to third persons, the Companies shall remain independent contractors in all matters relating to this Agreement.

# 8.7 Responsibility and Liability

The liability of the Companies shall be several, not joint or collective. Each Company shall be responsible only for its obligations, and shall be liable only for its proportionate share of the costs and expenses as provided in this Agreement, and any liability resulting herefrom. Each Company will defend, indemnify, and save harmless the other Company hereto from and against any and all liability, loss, costs, damages, and expenses, including reasonable attorney's fees, caused by or growing out of the gross negligence, willful misconduct, or breach of this Agreement by such indemnifying Company.

IN WITNESS WHEREOF, each Company has caused this Agreement to be executed and attested by its duly authorized officers on the day and year first above written.

LOUISVILLE GAS AND ELECTRIC COMPANY

By:

Name: Lonnie E Bellar

Title: SUP Ops

KENTUCKY UTILITIES COMPANY

By: Montallu Name: Lonnie E Bellon Title: SUP Ops

# SCHEDULE A ALLOCATION OF OPERATING EXPENSES OF THE TRANSMISSION SYSTEM OPERATOR

# 1. <u>Purpose</u>

The purpose of this Schedule is to provide a basis for the allocation between the Companies for the costs of the Transmission System Operator.

# 2. <u>Costs</u>

Costs for the purpose of this Schedule shall include all costs incurred by the Transmission System Operator, including, among others, such items as salaries, wages, rentals, the cost of materials and supplies, interest, taxes, depreciation, transportation, travel expenses, and other professional services.

# 3. <u>Allocation of Costs</u>

Transmission System Operator Company allocation percentages will be calculated each year to be effective on June 1<sup>st</sup> of each year using the previous year's summation of the Transmission Peak Demands as found in FERC Form 1 for Kentucky Utilities Company (KU) and Louisville Gas & Electric Company (LG&E) page 400 sum of column b.

Allocation of Costs to each Company will be calculated by the following formulas:

KU Expense Allocation % = KU FERC Form 1, page 400 sum of column b divided by the sum of (KU FERC Form 1, page 400 sum of column b plus LG&E FERC Form 1, page 400 sum of column b).

LG&E Expense Allocation % = 1 minus KU Expense Allocation %

For example, based on the 2016 FERC Form 1 data for the calendar year 2016: KU Expense Allocation % = 54,436 / (54,436 + 29,300) = 65.01%LG&E Expense Allocation % = 1 - 65.01% = 34.99%

# SCHEDULE B ALLOCATION OF TRANSMISSION REVENUES and COSTS

# 1. <u>Allocation of Transmission Revenues</u>

The revenue the Transmission Service Operator receives pursuant to Section 6.4 of the Agreement for service provided by the Companies under Parts II and III of the LG&E-KU Open Access Transmission Tariff, other than revenues received pursuant to Sections 26 (Stranded Cost Recovery), 27 (Compensation for New Facilities and Redispatch Costs), and 34.4 (Redispatch Charge) thereof, will be allocated between the Companies based on Company allocation percentages that will be calculated each year to be effective on June 1<sup>st</sup> of each year using the previous year's net book value of Transmission assets as found in FERC Form 1 for Kentucky Utilities Company (KU) and Louisville Gas & Electric Company (LG&E).

Allocation of Transmission Revenues to each Company will be calculated by the following formulas:

KU Net Book Transmission Value (KU Net) = KU FERC Form 1, page 207 line 58(g) minus KU FERC Form 1, page 219 line 25(b)

LG&E Net Book Transmission Value (LG&E Net) = LG&E FERC Form 1, page 207 line 58(g) minus LG&E FERC Form 1, page 219 line 25(b)

KU Allocation % for Revenue = KU Net divided by sum of KU Net plus LG&E Net

LG&E Allocation % for Revenue = 1 minus KU Allocation % for Revenue

For example, based on the 2016 FERC Form 1 data for the calendar year 2016: KU Net = 874,918,082 - 336,270,966 = 538,647,116 LG&E Net = 424,955,863 - 152,022,964 = 272,932,899 KU Allocation % for Revenue = 538,647,116 / (538,647,116 + 272,932,899) = 66.37% LG&E Allocation % for Revenue = 1 - 66.37% = 33.63%

Revenues related to redispatch costs and Direct Assignment Facilities will be assigned to LG&E and KU in proportion to the related costs that each of them incurred. Assignment of revenues received from a third party related to stranded cost or new transmission facilities shall be determined on a case-by-case basis.

# 2. <u>Allocation of Ancillary Service Revenues</u>

(a) Revenues received from Scheduling, System Control and Dispatch Service under Schedule 1 of the LG&E-KU Open Access Transmission Tariff will be allocated between the Companies based on the same percentages as Schedule A above.

(b) All revenues received for Ancillary Services under Schedule 2 - Reactive Supply and Voltage Control,

Transmission System Operator Company allocation percentages will be calculated each year to be effective on June 1<sup>st</sup> of each year using the latest Schedule 2 true up filing filed at FERC per Schedule 2 rate schedule.

Allocation of Ancillary Service Revenues to each Company will be calculated by the following formulas:

KU Schedule 2 Revenue % (KU-2 Rev) = MVAR-Hours produced by LG&E/KU Units located on KU divided by the total MVAR-Hours produced by LG&E/KU Units.

LG&E Schedule 2 Revenue % (LG&E-2 Rev) = 1 minus KU-2 Rev

For Example, based on calendar year 2016: KU-2 Rev = 343,665 MVAR-Hours / (343,665 + 396,456) MVAR-Hours = 46.43% LG&E-2 Rev = 1 - 46.43% = 53.57%

(c) All revenues received for Ancillary Services under Schedule 4 - Energy Imbalance Service and Schedule 9 – Generator Imbalance Service, shall be allocated to the Company that produced the energy as assigned by the AFB process.

 (d) All revenues received for Ancillary Services under Schedule 3 – Regulation and Frequency Response, Schedule 5 - Operating Reserve Spinning Reserve Service and Schedule 6
Operating Reserve Supplemental Reserve Service of the LG&E-KU Open Access Transmission Tariff will be allocated between the Companies to be effective on June 1<sup>st</sup> of each year using the previous year's net annual generation amount as found in FERC Form 1 for Kentucky Utilities Company (KU) and Louisville Gas & Electric Company (LG&E).

3. Allocation of Generation Services Costs

Generation cost allocation percentages will be calculated each year to be effective on June 1<sup>st</sup> of each year using the latest Schedule 2 true up filing filed at FERC per Schedule 2 rate schedule.

Allocation of cost to each Company will be calculated by the following formulas:

KU Gen. Services % = KU FERC Form 1, page 401a line 9(b) divided by the sum of (KU FERC Form 1, page 401a line 9(b) plus LG&E FERC Form 1, page 401a line 9(b).

LG&E Gen. Services % = 1 minus KU Gen. Services %

For Example, based on the 2016 FERC Form 1 data for the calendar year 2016: KU Gen. Services % = 21,021,762 / (21,021,762 + 12,908,109) = 61.96%LG&E Gen. Services % = 1 - 61.96% = 38.04%

# LOUISVILLE GAS AND ELECTRIC COMPANY

By:

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Title: SUP Ops

# KENTUCKY UTILITIES COMPANY

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