COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

)

In the Matter of:

APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY FOR AN ORDER AUTHORIZING THE ISSUANCE OF INDEBTEDNESS

CASE NO. 2022-00007

VERIFIED APPLICATION

Louisville Gas and Electric Company ("LG&E" or "the Company"), hereby requests, pursuant to KRS 278.300 and 807 KAR 5:001, Section 18, that the Commission authorize LG&E to incur additional debt not to exceed the aggregate amount of \$700,000,000 in the form of First Mortgage Bonds, intermediate term financings, or a combination thereof, during 2022 or 2023. LG&E also requests a renewal of its authority to maintain a revolving line of credit of up to \$750,000,000 and requests that the Commission renew the authority to allow LG&E to exercise extensions of its existing or any new multi-year revolving credit line(s) in 2022 and 2023, maturing up to five years from the effective date of the amendment.

In support of this Application, LG&E states as follows:

 The Company's full name is Louisville Gas and Electric Company. The post office address of the Company is 220 West Main Street, Post Office Box 32010, Louisville, KY 40202.
LG&E was incorporated in Kentucky on July 2, 1913, and attests that it is in good corporate standing. LG&E can be reached at the email addresses of the counsel listed below.

2. Copies of all orders, pleadings, and other communications related to this proceeding should be directed to:

Daniel K. Arbough Treasurer Louisville Gas and Electric Company 220 West Main Street Louisville, Kentucky 40202 dan.arbough@lge-ku.com

Robert Conroy Vice President, State Regulation and Rates Louisville Gas and Electric Company 220 West Main Street Louisville, Kentucky 40202 robert.conroy@lge-ku.com

Allyson K. Sturgeon, Vice President and Deputy General Counsel PPL Services Corporation Sara Judd, Senior Counsel LG&E and KU Services Company 220 West Main Street Louisville, Kentucky 40202 asturgeon@pplweb.com sara.judd@lge-ku.com

> Kendrick R. Riggs Stoll Keenon Ogden PLLC 500 West Jefferson Street Suite 2000 Louisville, Kentucky 40202-2828 kendrick.riggs@skofirm.com

3. LG&E is a public utility as defined by KRS 278.010(3)(a) and (b), engaged in the electric and gas business. It generates and purchases electricity, and distributes and sells electricity at retail in nine Kentucky Counties¹ to approximately 429,000 customers. LG&E also purchases, stores, and transports natural gas and distributes and sells natural gas at retail in seventeen Kentucky Counties² to approximately 333,000 customers. A description of LG&E's properties is set out in Exhibit 1 to this Application.

FINANCING REQUEST

4. LG&E requests, pursuant to KRS 278.300, that the Commission authorize it to incur additional First Mortgage Bonds, intermediate term financings or a combination thereof, in

¹ Jefferson, Bullitt, Hardin, Henry, Meade, Oldham, Shelby, Spencer, and Trimble.

² Jefferson, Barren, Bullitt, Green, Hardin, Hart, Henry, Larue, Marion, Meade, Metcalfe, Nelson, Oldham, Shelby, Spencer, Trimble, and Washington.

a principal amount not to exceed \$700,000,000 during 2022 or 2023. The intermediate term financings may be made up of one or more series of privately placed or publicly issued, unsecured, intermediate term bonds or notes, including direct bank term loans (collectively, "Intermediate Term Financings"). As discussed below, the \$700,000,000 is comprised of up to \$300,000,000 of potential refinancing and \$400,000,000 that is a renewal of a previously authorized amount.³

5. LG&E is also requesting to renew its authority to maintain a revolving line of credit in an amount of up to \$750,000,000, and to extend its existing or new revolving line(s) of credit during 2022 and 2023 for up to five years from the date of each amendment.

6. LG&E obtains financing through numerous sources of capital, including the forms of debt that are the subject of this Application. LG&E does not assign specific financing to any particular project or use and does not project-finance capital projects. All components of LG&E's capital structure are used to fund capital expenditures. Thus, the uses cited in this Application are general reasons for LG&E's need for debt financing, rather than projects to which specific financing will be assigned.

7. The increases to LG&E's long-term debt and short-term debt requested in this Application and existing authority for indebtedness as it relates to this Application are summarized in the following table:

³ Electronic Application of Louisville Gas and Electric Company for an Order Authorizing the Issuance of Indebtedness, Case No. 2020-00110, Order (Ky. PSC May 26, 2020).

	Amount Authorized/Outstanding	Requested Increase	Type of Debt	Total Amount
Long-Term Debt	\$300,000,000 ⁴	\$400,000,000 ⁵	First Mortgage Bonds or Intermediate Term Financings	\$700,000,000
Short-Term Debt	\$750,000,000 ⁶	None	Revolving Credit Line	\$750,000,000

First Mortgage Bonds/Intermediate Term Financings

8. LG&E requests, pursuant to KRS 278.300, that the Commission authorize it to incur First Mortgage Bonds, Intermediate Term Financings, or a combination thereof, in a principal amount not to exceed \$700,000,000 during 2022 or 2023. The proceeds of the indebtedness will be used to repay existing short-term debt, to potentially complete an advanced refinancing of an existing First Mortgage Bond series, in whole or in part, up to \$300 million plus any applicable make-whole costs, and for general corporate purposes. At January 31, 2022, LG&E had short-term debt outstanding totaling \$382 million.

9. LG&E has a \$300,000,000 First Mortgage Bond series that matures on October 1, 2025. Investor demand for bonds issued by utilities whose generation portfolio is primarily coal has significantly declined in recent years. This aversion toward coal exposure has resulted in wider credit spreads and higher interest rates. For example, the difference between LG&E credit spreads and those for PPL Electric Utilities (a transmission and distribution utility with very similar credit ratings under the same corporate parent) have widened since 2019 by an approximate range of 0.20% - 0.30%. To mitigate the risk of this trend of wider credit spreads and investor demand impacting the refinancing of the 2025 maturity, the Company may redeem or call the bonds early,

⁴ \$300,000,000 of existing First Mortgage Bonds due in 2025.

⁵ Renewal of authority granted in Case No. 2020-00110. *Electronic Application of Louisville Gas and Electric Company for an Order Authorizing the Issuance of Indebtedness*, Case No. 2020-00110, Order (Ky. PSC May 26, 2020).

⁶ Id.

in whole or in part. If there is sufficient demand for new First Mortgage Bonds or for Intermediate Term Financings, the Company will issue the call notice(s) to the 2025 bondholders only after sufficient financing is secured. If the demand is not sufficient, the refinancing transaction may not be completed. Based on current market conditions, a 10-year First Mortgage Bond would be priced at approximately 3.30% while a 30-year First Mortgage Bond would be priced at approximately 3.90%.

10. The \$300 million 3.30% First Mortgage Bond series maturing on October 1, 2025 were issued at a price of 99.957%, with associated expense of \$2.6 million. The bonds were used to repay short-term debt, to pay \$250 million 1.65% First Mortgage Bonds (that matured on November 15, 2015), and for other general business purposes. Further information about the First Mortgage Bond series that LG&E will potentially refinance is included in the financial exhibit, attached as Exhibit 2.

11. In addition to mitigating the risk of the widening credit spreads, redeeming the 2025 bonds early also eliminates the risk of rising interest rates on existing First Mortgage Bond refinancing transactions until the earlier of the maturity date of the new debt or 2040. The most recent Bureau of Labor Statistics report showed the Consumer Price Index had increased by 7.5% since last year⁷ which is the highest inflation rate in the last 40 years. In response, the Federal Reserve stated, "it will soon be appropriate to raise the target range for the federal funds rate."⁸ Raising short-term interest rates could cause an increase in long-term rates. The First Mortgage Bonds that mature in 2025 are the only First Mortgage Bonds the Company currently has

⁷ U.S. Bureau of Labor Statistics, Consumer Price Index, CPI Latest Numbers, available at https://www.bls.gov/cpi/latest-numbers.htm (last accessed Feb. 25, 2022).

⁸ Federal Reserve issues FOMC statement, Board of Governors of the Federal Reserve System, Jan. 26, 2022, available at https://www.federalreserve.gov/newsevents/pressreleases/monetary20220126a.htm.

outstanding maturing prior to 2040. Therefore, locking in rates that are historically attractive now mitigates potential increases in interest expense and the Company's cost of service to customers over the next two decades.

12. The Company's Mortgage Indenture (the "Indenture") authorizes it to issue, from time to time, first mortgage bonds of one or more series, with each series having such date, maturity date(s), interest rate(s), and other terms as may be established by a supplemental indenture executed by the Company in connection with such series. All bonds issued under the Indenture are required to be equally and ratably secured by a first mortgage lien, subject to permitted encumbrances and exclusions, on substantially all of the Company's permanently fixed properties in Kentucky. A copy of the form of the Indenture has been previously filed with the Commission in Case No. 2015-00138.⁹

13. If the Company decides to issue First Mortgage Bonds in any amount up to an aggregate principal amount of \$700,000,000 in 2022 or 2023, the First Mortgage Bonds of each series would be issued and secured by the Indenture as to be further supplemented and amended by a supplemental indenture creating the bonds of such series. Such supplemental indenture would set forth the terms and provisions of such series, including without limitation, the maturity date(s), interest rate(s), redemption provisions, and other applicable terms. The price, maturity date(s), interest rate(s), and the redemption provisions, and other terms and provisions of each series of First Mortgage Bonds (including, if all or a portion of the First Mortgage Bonds bear a variable rate of interest, the method for determining the interest rates), would be determined on the basis of negotiations among LG&E and the underwriters, agents, or other purchasers of such First Mortgage Bonds. The amount of compensation to be paid to underwriters or agents for their

⁹ Application of Louisville Gas and Electric Company for an Order Amending and Extending Existing Authority with Respect to Revolving Line of Credit, Case No. 2015-00138, filed May 11, 2015.

services would not exceed one percent (1%) of the principal amount of the First Mortgage Bonds of the series to be sold. In addition to the compensation paid to underwriters, based upon past experience with similar financings, LG&E estimates that issuance costs would be approximately \$2 million.

14. To the extent LG&E can issue First Mortgage Bonds that are the lowest cost source of funds available to the Company, LG&E will continue to evaluate the availability of this funding source. LG&E is requesting authority for the Intermediate Term Financings in addition to the First Mortgage Bonds to provide flexibility, and to ensure the Company can timely issue debt while obtaining the most favorable pricing under the existing circumstances. The First Mortgage Bonds must be at least \$300,000,000 to be eligible to be included in the Bloomberg U.S. Aggregate Bond Index which broadens the pool of potential buyers, and results in lower interest rates. The First Mortgage Bond market prefers larger, more liquid, transactions. It may be more advantageous for the Company to issue Intermediate Term Financings in an amount less than \$300,000,000 in the near-term, and combine this amount with future financing needs to ultimately issue a larger First Mortgage Bond in the future.

15. If the Company decides to issue Intermediate Term Financings in any amount up to an aggregate principal amount of \$700,000,000 in 2022 or 2023, the provisions of the bonds, notes, or loans, including interest rate(s), maturity date(s), expenses, and other applicable terms, will be governed by the agreements between LG&E and the lenders. The commercial terms, excluding pricing, fees, or interest rates, for bank term loans are expected to be very similar to the commercial terms for the existing revolving line of credit except that once funds are repaid they may not be re-borrowed. The other forms of Intermediate Term Financings would likely be done using one or more new indentures as a method to establish the terms of the indebtedness.

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16. LG&E requests authority to enter into one or more interest rate hedging agreements (including an interest rate cap, swap, collar, or similar agreement, collectively, the "Hedging Facility") through an affiliate company, or directly with a bank or financial institution (the "Counterparty"). If LG&E elects to issue variable rate bonds, the Hedging Facility would be an interest rate agreement designed to allow LG&E to actively manage and limit its exposure to changes in interest rates. If a fixed rate bond is issued, the Hedging Facility would be designed to lower LG&E's exposure to changes in long term rates between the date of the Hedging Facility and the bond issuance date or to lower the volatility in the value of the bond if the Hedging Facility is entered into after the bond is issued. LG&E requests authority to establish regulatory assets or liabilities for accounting purposes for the losses and gains arising from a Hedging Facility and amortize the gains and losses over the remaining life of the new debt.

17. Based on current market conditions, the cost to fix the interest rate of a variable rate bond for three years would be approximately 116 basis points (1.16%). The Hedging Facility could also be used to lock in interest rates in advance of a debt issuance. Thus, LG&E anticipates that it could enter into one or more of the preceding Hedging Facilities prior to issuance of some or all of the types of debt for which approval is being sought. Based on current market conditions, the Company could lock in 30-year rates for six months at approximately 22 basis points (0.22%) below current levels.

18. The terms of each Hedging Facility will be negotiated by LG&E with the respective Counterparty and would be subject to market conditions.

8

Revolving Line of Credit

19. LG&E was first granted authority to enter into multi-year revolving credit facilities in Case No. 2007-00232 by Orders dated August 2, 2007, and August 9, 2007.¹⁰ In that case, the Commission found that granting LG&E authority to enter into multi-year revolving credit facilities under which LG&E could incur short-term debt from time to time would reduce the time and cost of negotiating and renewing short-term debt arrangements.¹¹

20. By Order dated May 26, 2020, in Case No. 2020-00110, the Commission authorized LG&E to extend its existing revolving line of credit for up to five years from the effective date of the amendment as well as increase it from \$500,000,000 by \$250,000,000, bringing the total authority to \$750,000,000.¹² LG&E requests authority to extend its authority to maintain a revolving line of credit of up to \$750,000,000 for up to five years from the effective date of amendment.

21. The revolving credit facility would be used for the same purposes for which existing credit is currently available. Loan proceeds could be used to provide short-term financing for LG&E's general corporate funding needs and to provide new or expanded liquidity or credit support for LG&E's other debt.

22. LG&E also requests the Commission authorize LG&E, during 2022 and 2023, to extend the termination date of the existing revolving credit facility or any new credit facility to five years from the date of each amendment. By Order dated May 26, 2020, in Case No. 2020-00110, the Commission authorized LG&E to extend the term of its existing revolving credit line

¹⁰ Application of Louisville Gas and Electric Company for an Order Authorizing the Issuance of Securities and the Assumption of Obligation, Case No. 2007-00232, Order (Ky. PSC Aug. 2 and 9, 2007).

¹¹ Id. LG&E's authority related to its revolving credit facility was further extended in numerous cases.

¹² Electronic Application of Louisville Gas and Electric Company for an Order Authorizing the Issuance of Indebtedness, Case No. 2020-00110, Order (Ky. PSC May 26, 2020).

for a five-year term in 2020 and 2021.¹³ On December 6, 2021, LG&E extended the Credit Agreement from January 26, 2024 to December 6, 2026.¹⁴ Extending the current revolving credit facilities will allow LG&E to continue to obtain favorable short-term debt costs while avoiding higher commitment fees and related transaction costs expected in the future. This would provide LG&E with flexibility to further optimize its short-term debt for its customers. If the Commission grants the authority, LG&E will provide notice of each extension to the Commission within thirty days of execution.

23. Under the current agreements, LG&E must notify the revolving credit service providers of its intent to extend the current lines. As such, LG&E requests authority to amend its existing Credit Agreement to effectuate the extension, and also requests authority to amend and restate the Credit Agreement, if necessary. Although LG&E expects that all or most credit service providers will agree to extend the credit facility at the current individual or aggregate participation levels, LG&E also requests alternatively to enter into separate or individual revolving credit lines to replace any non-extended portion of the credit facility, up to the maximum total aggregate sizes, dates, and terms described further herein.

24. Pursuant to 807 KAR 5:001, Section 18(1)(d) and (e), the extended credit facilities are expected to be on similar terms as LG&E's existing revolving credit and would be available for the same purposes for which revolving credit is currently available and the purposes described in this Application.

Required Financing Information

25. Exhibit 2 to this Application contains the financial exhibit required by 807 KAR 5:001, Section 18(2)(a), as described by 807 KAR 5:001, Section 12. It also contains information

¹³ *Id*.

¹⁴ See December 13, 2021 filing in Case No. 2020-00110.

required by 807 KAR 5:001, Section 18(2)(b).

26. Copies of LG&E's mortgages were filed with the Commission in Case No. 2015-00138,¹⁵ and the most recently executed supplemental indentures are attached as Exhibit 3.

27. No contracts have been made for the disposition of any of the securities which LG&E proposes to issue, or for the proceeds of such sale.

28. A certified copy of LG&E's Board of Directors resolution authorizing the financing as discussed in this Application will be filed as soon as it is available.

29. Other requirements of the Commission's regulations regarding this Application, 807 KAR 5:001, Section 18, including (l)(c) regarding the amount and kind of notes, etc., (l)(d) regarding the use to be made of the proceeds, (1)(e) regarding the intended use of the proceeds, and (1)(f) regarding the obligations being refunded have been supplied in the preceding paragraphs of this Application.¹⁶

WHEREFORE, Louisville Gas and Electric Company respectfully asks the Commission to enter an order within 60 days as provided in KRS 278.300(2) authorizing LG&E to do the following:

(1) Incur debt in 2022 or 2023 not to exceed the aggregate amount of \$700,000,000 in the form of First Mortgage Bonds, Intermediate Term Financings, or a combination thereof;

(2) Renew the authority for the Company to maintain a revolving line of credit of up to\$750,000,000;

¹⁵ The copy was filed with the Commission on May 11, 2015.

¹⁶ LG&E is proposing to potentially use proceeds to refinance an outstanding First Mortgage Bond series, not discharge or refund obligations as contemplated in 807 KAR 5:001, Section 18(1)(f), for which certain information is required regarding the outstanding obligations. Information about the First Mortgage Bond series is included in the financial exhibit, attached as Exhibit 2.

(3) Exercise extensions of its existing or any new multi-year revolving credit line in 2022 and 2023 to extend the credit facility maturity date to up to five years from the effective date of the amendment; and

(4) Provide notice to the Commission of each extension of the revolving credit facility within 30 days of execution.

Dated: March 2, 2022

Respectfully submitted,

P. Rier

Kendrick R. Riggs Stoll Keenon Ogden PLLC 500 West Jefferson Street, Suite 2000 Louisville, Kentucky 40202 Telephone: (502) 333-6000 Fax: (502) 627-8722 kendrick.riggs@skofirm.com

Allyson K. Sturgeon Vice President and Deputy General Counsel PPL Services Corporation

Sara V. Judd, Senior Counsel LG&E and KU Services Company 220 West Main Street Louisville, Kentucky 40202 asturgeon@pplweb.com sara.judd@lge-ku.com

Counsel for Louisville Gas and Electric Company

CERTIFICATE OF COMPLIANCE

In accordance with the Commission's Order of July 22, 2021 in Case No. 2020-00085 (Electronic Emergency Docket Related to the Novel Coronavirus COVID-19), this is to certify that the electronic filing has been transmitted to the Commission on March 2, 2022; and that there are currently no parties in this proceeding that the Commission has excused from participation by electronic means.

Counsel for Louisville Gas and Electric Company

VERIFICATION COMMONWEALTH OF KENTUCKY)) COUNTY OF JEFFERSON)

The undersigned, **Daniel K. Arbough**, being duly sworn, deposes and says that he is the Treasurer for Louisville Gas and Electric Company and Kentucky Utilities Company and an employee of LG&E and KU Services Company, that he has personal knowledge of the matters set forth in the foregoing Verified Application and that the material contained therein is true and correct to the best of his information, knowledge, and belief.

Daniel K. Arbough

Subscribed and sworn to before me, a Notary Public in and before said County and State, this $2n^{2}$ day of March, 2022.

aroline J. Davieon (SEAL)

Notary Public, ID No. 61410 CAROLINE J. DAVISON Notary Public, State at Large, KY My commission expires Jan. 22, 2023 Notary ID# 614103

My Commission Expires: January 22, 2023

LOUISVILLE GAS AND ELECTRIC

(807 KAR 5:001, SEC. 18(1)(b))

A DESCRIPTION OF APPLICANT'S PROPERTY, INCLUDING A STATEMENT OF THE NET ORIGINAL COST OF THE PROPERTY AND THE COST THEREOF TO APPLICANT

March 2, 2022

The applicant's generating, transmission and distribution systems described herein are calculated annually. As of December 31, 2021, the applicant had ownership in 6 and operated 6 coal fired steam electric generating units having a total capacity of 1,939 Mw; owned and operated a hydroelectric generating station having a total capacity of 64 Mw; had ownership in a solar powered generating station having a total capacity of 3 Mw; and had ownership in 12 and operated 9 gas/oil fired units having a total capacity of 754 Mw.

The applicant's owned electric transmission system included 77 substations (61 of which are shared with the distribution system) with a total capacity of 8 million kVA and 669 pole miles of lines. The electric distribution system 96 substations (61 of which are shared with the transmission system) with a total capacity of 5 million kVA, 3,883 circuit miles of overhead lines and 2,753 underground cable miles.

The applicant's natural gas system includes 4,418 miles of gas distribution mains and 370 miles of gas transmission mains, consisting of 233 miles of gas transmission pipeline, 118 miles of gas transmission storage lines, and 19 miles of gas combustion turbine lines. Five underground natural gas storage fields, with a total working natural gas capacity of approximately 15 Bcf, are used in providing natural gas service to ultimate consumers.

Other properties include office buildings, service centers, warehouses, garages and other structures and equipment.

The net original cost of the property and cost thereof to the applicant at December 31, 2021:

	<u>Electric</u>	<u>Gas</u>	Common	Total
Original Cost	\$ 6,599,799,420	\$ 1,670,955,425	\$ 346,883,772 \$	8,617,638,617
Less Reserve for Depreciation	1,888,588,718	327,622,158	130,581,512	2,346,792,388
Net Original Cost Allocation of Common	 4,711,210,702	1,343,333,267	216,302,260	6,270,846,229
To Electric and Gas	149,248,559	67,053,701	(216,302,260)	-
Total	\$ 4,860,459,261	\$ 1,410,386,968	\$ - \$	6,270,846,229

* Excludes \$272,388,408 related to cost of removal reserves that is not included in the reserve in the Financial Statements and Additional Information, but instead is included as a regulatory liability

LOUISVILLE GAS AND ELECTRIC

FINANCIAL EXHIBIT (807 KAR 5:001 SEC. 18(2)(a) and SEC. 12)

March 2, 2022

(1) Amount and kinds of stock authorized.

75,000,000 shares of Common Stock, without par value 1,720,000 shares of Cumulative Preferred Stock, at \$25 par value -- authorized, but unissued 6,750,000 shares of Preferred Stock, without par value -- authorized, but unissued

(2) Amount and kinds of stock issued and outstanding.

Common Stock:

21,294,223 shares issued and outstanding, without par value, recorded at \$424,334,535.

(3) Terms of preference of preferred stock whether cumulative or participating, or on dividends or assets otherwise.

None

(4) Brief description of each mortgage on property of applicant, giving date of execution name of mortgagor, name of mortgagee, or trustee, amount of indebtedness authorized to be secured thereby, and the amount of the indebtedness actually secured, together with any sinking fund provisions.

Date of Execution: As of October 1, 2010 (Supplemental Indentures were executed on October 15, 2010, November 1, 2010, November 1, 2013, September 1, 2015, September 1, 2016 and May 15, 2017 and March 1, 2019.) Mortgagor: Louisville Gas and Electric Trustee: The Bank of New York Mellon Amount of Authorized Debt: One quintillion dollars Amount of Debt Secured: \$2,024,200,000 Sinking Fund Provisions: None Pledged Assets: Substantially all real and tangible personal property of Louisville Gas and Electric located in Kentucky (5) Amount of bonds authorized, and amount issued giving the name of the public utility which issued the same, describing each class separately, and giving date of issue, face value, rate of interest, date of maturity and how secured, together with the amount of interest paid thereon during the last fiscal year.

Secured by first mortgage lien on substantially all real and tangible personal property in Kentucky.

			Principa	l Amount	Interest Expense
Date of Issue	Date of Maturity	Rate of Interest	Authorized	Outstanding at December 31 2021	Year Ended December 31 2021
Pollution Control E	Bonds				
09/15/16	09/01/44	1.300%	\$ 125,000,000	\$ 125,000,000	\$ 1,625,000
03/06/02	09/01/26	0.900%	22,500,000	22,500,000	202,500
03/06/02	09/01/26	0.625%	27,500,000	27,500,000	478,958
03/22/02	11/01/27	1.350%	35,000,000	35,000,000	614,833
03/22/02	11/01/27	1.350%	35,000,000	35,000,000	614,833
11/20/03	10/01/33	2.000%	128,000,000	128,000,000	2,512,000
04/13/05	02/01/35	1.750%	40,000,000	40,000,000	700,000
06/01/17	06/01/33	3.750%	60,000,000	60,000,000	2,250,000
04/26/07	06/01/33	Variable	35,200,000	35,200,000	253,695
04/26/07	06/01/33	Variable	31,000,000	31,000,000	225,941
Interest Rate Swap	08				2,864,273
			\$ 539,200,000	\$ 539,200,000	\$ 12,342,033
First Mortgage Bo	nds				
09/28/15	10/01/25	3.300%	\$ 300,000,000	\$ 300,000,000	11,305,380
11/16/10	11/15/40	5.125%	285,000,000	285,000,000	14,606,250
11/14/13	11/15/43	4.650%	250,000,000	250,000,000	10,191,296
09/28/15	10/01/45	4.375%	250,000,000	250,000,000	11,923,556
04/01/19	04/01/49	4.250%	400,000,000	400,000,000	17,000,000
			\$ 1,485,000,000	\$ 1,485,000,000	\$ 65,026,482

- (6) As of December 31, 2021, there was \$69 million of commercial paper outstanding at a weighted average rate of 0.31%.
- (7) Other indebtedness, giving same by classes and describing security, if any with a brief statement of the devolution or assumption of any portion of such indebtedness upon or by person or corporation if the original liability has been transferred, together with amount of interest paid thereon during the last fiscal year.

As of December 31, 2021, LG&E had \$324 million of money pool borrowing outstanding at a rate of 0.33%¹.

(8) Rate and amount of dividends paid during the five previous fiscal years, and amount of capital stock on which dividends were paid.

Dividends on Common Stock, without par value (not based on rate per share)

2017	\$192,000,000
2018	\$156,000,000
2019	\$182,000,000
2020	\$161,000,000
2021	\$192,000,000

The amount of total proprietary capital on which dividends were paid as of Dec. 31st

2017	\$2,138,595,752
2018	\$2,298,010,005
2019	\$2,373,813,901
2020	\$2,559,226,055
2021	\$2,690,349,509

(9) Detailed Income Statement, Balance Sheet and Statement of Retained Earnings

Monthly Financial and Operating Reports are filed each month with the Kentucky Public Service Commission. Attached are detailed Statements of Income, Balance Sheets and Retained Earnings for the Company for the period ending December 31, 2021.

¹ LG&E maintains a syndicated revolving credit facility of \$500 million. Although at December 31st there was no outstanding balance on the revolver, LG&E has executed notes under the multiyear revolving credit program.

Louisville Gas and Electric Company Comparative Statement of Income December 31, 2021

	Year Ended December 31, 2021
Electric Operating Revenues	\$ 1,195,792,935.23
Gas Operating Revenues	361,199,900.17
Total Operating Revenues	1,556,992,835.40
Fuel for Electric Generation	266,983,720.80
Power Purchased	58,394,568.91
Gas Supply Expenses	116,787,532.87
Other Operation Expenses	268,442,208.16
Maintenance	120,220,167.78
Depreciation	257,988,437.49
Amortization Expense	18,828,742.72
Regulatory Debits	2,524,652.59
Regulatory Credits	(20,486.97)
Taxes	
Federal Income	42,431,627.18
State Income	5,064,715.31
Deferred Federal Income - Net	470,385.40
Deferred State Income - Net	8,202,179.17
Property and Other	55,175,164.52
Investment Tax Credit	147,653.00
Amortization of Investment Tax Credit	(856,725.00)
Loss (Gain) from Disposition of Allowances	(19.91)
Total Operating Expenses	1,220,784,524.02
Net Operating Income	336,208,311.38
Other Income Less Deductions	
Other Income Less Deductions	(5,378,889.84)
AFUDC - Equity	10,978.84
Total Other Income Less Deductions	(5,367,911.00)
Income Before Interest Charges	330,840,400.38
Interest on Long-Term Debt	77,368,516.33
Amortization of Debt Expense - Net	3,174,784.57
Other Interest Expenses	1,178,368.78
AFUDC - Borrowed Funds	(4,723.40)
Total Interest Charges	81,716,946.28
Net Income	\$ 249,123,454.10

Exhibit 2 Page 5 of 6

Louisville Gas and Electric Company Balance Sheets as of December 31, 2021

Assets

Utility Plant at Original Cost\$ $8,633,037,518.12$ $2,611,131,404.56$ TotalTotal $6,021,906,113.56$ Investments $6,021,906,113.56$ Ohio Valley Electric Corporation $594,286.00$ Nonutility Property - Less Reserve $840,343.03$ Special Funds $84,690,591.00$ Total $86,125,220.03$ Current and Accrued Assets $231,272,243.18$ Cash $2,064,132.00$ Accounts Receivable - Less Reserve $231,272,243.18$ Notes Receivable - Less Reserve $34,846,261.54$ Materials and Supplies - At Average Cost $31,509,061.35$ Fuel $31,509,061.35$ Plant Materials and Operating Supplies $48,158,123.22$ Storee Expense $648,058.10$ Gas Stored Underground $54,184,488.79$ Emission Allowances 135.21 Prepayments $20,831,580.65$ Total $432,670,377.99$ Deferred Debits and Other $16,234,169.32$ Unamortized Debt Expense $16,234,169.32$ Unamortized Debt Expense $219,479,984.07$ Deferred Regulatory Assets $370,609,867.36$ Other Deferred Debits $4,563,757.46$ Total $623,145,234.85$ Total Assets $$7,163,846,946.43$	Utility Plant	
Less: Reserves for Depreciation and Amortization $2,611,131,404.56$ Total $6,021,906,113.56$ Investments $594,286.00$ Nonutility Property - Less Reserve $840,343.03$ Special Funds $84,690,591.00$ Total $86,125,220.03$ Current and Accrued Assets $9,156,293.95$ Cash $9,156,293.95$ Temporary Cash Investments $2,064,132.00$ Accounts Receivable - Less Reserve $231,272,243.18$ Notes Receivable from Associated Companies $34,846,261.54$ Materials and Supplies - At Average Cost $31,509,061.35$ Plant Materials and Operating Supplies $48,158,123.22$ Stores Expense $648,058.10$ Gas Stored Underground $54,184,488.79$ Emission Allowances 135.21 Prepayments $20,831,580.65$ Total $432,670,377.99$ Deferred Debits and Other $16,234,169.32$ Unamortized Loss on Bonds $12,257,456.64$ Accumulated Deferred Income Taxes $219,479,984.07$ Deferred Regulatory Assets $370,609,867.36$ Other Deferred Debits $4,563,757.46$ Total $623,145,234.85$	-	\$ 8,633,037,518.12
Total 6.021,906,113.56 Investments 594,286.00 Nonutility Property - Less Reserve 840,343.03 Special Funds 84,690,591.00 Total 86,125,220.03 Current and Accrued Assets 9,156,293.95 Cash 9,156,293.95 Temporary Cash Investments 231,272,243.18 Notes Receivable - Less Reserve 231,272,243.18 Notes Receivable - Less Reserve 231,272,243.18 Notes Receivable from Associated Companies 34,846,261.54 Materials and Supplies - At Average Cost 31,509,061.35 Plant Materials and Operating Supplies 48,158,123.22 Stored Underground 54,184,488.79 Emission Allowances 20,831,580.65 Total 432,670,377.99 Deferred Debits and Other 16,234,169.32 Unamortized Loss on Bonds 12,257,456.64 Accumulated Deferred Income Taxes 219,479,984.07 Deferred Regulatory Assets 370,609,867.36 Other Deferred Debits 4,563,757.46 Total 623,145,234.85		2,611,131,404.56
Investments $594,286.00$ Nonutility Property - Less Reserve. $840,343.03$ Special Funds. $84,690,591.00$ Total. $86,125,220.03$ Current and Accrued Assets $9,156,293.95$ Cash. $9,156,293.95$ Temporary Cash Investments. $-$ Accounts Receivable $2,064,132.00$ Accounts Receivable $2,064,132.00$ Accounts Receivable $34,846,261.54$ Materials and Supplies - At Average Cost $31,509,061.35$ Fuel. $9,156,293.95$ Gas Stored Underground. $54,184,488.79$ Emission Allowances. $9,156,293.95$ Total. $432,670,377.99$ Deferred Debits and Other $16,234,169.32$ Unamortized Debt Expense. $16,234,169.32$ Unamortized Loss on Bonds. $12,257,456.64$ Accumulated Deferred Income Taxes. $219,479,984.07$ Deferred Regulatory Assets. $370,609,867.36$ Other Deferred Debits. $4,563,757.46$ Total. $623,145,234.85$	1	 , , <u>,</u>
Ohio Valley Electric Corporation 594,286.00 Nonutility Property - Less Reserve 840,343.03 Special Funds 84,690,591.00 Total 86,125,220.03 Current and Accrued Assets 9,156,293.95 Cash 9,156,293.95 Temporary Cash Investments - Accounts Receivable 2,064,132.00 Accounts Receivable from Associated Companies 34,846,261.54 Materials and Supplies - At Average Cost 31,509,061.35 Fuel 31,509,061.35 Plant Materials and Operating Supplies 48,158,123.22 Stored Underground 54,184,488.79 Emission Allowances 135.21 Prepayments 20,831,580.65 Total 432,670,377.99 Deferred Debits and Other 16,234,169.32 Unamortized Loss on Bonds 12,257,456.64 Accumulated Deferred Income Taxes 219,479,984.07 Deferred Regulatory Assets 370,609,867.36 Other Deferred Debits 4,563,757.46 Total 623,145,234.85	Total	6,021,906,113.56
Ohio Valley Electric Corporation 594,286.00 Nonutility Property - Less Reserve 840,343.03 Special Funds 84,690,591.00 Total 86,125,220.03 Current and Accrued Assets 9,156,293.95 Cash 9,156,293.95 Temporary Cash Investments - Accounts Receivable 2,064,132.00 Accounts Receivable from Associated Companies 34,846,261.54 Materials and Supplies - At Average Cost 31,509,061.35 Fuel 31,509,061.35 Plant Materials and Operating Supplies 48,158,123.22 Stored Underground 54,184,488.79 Emission Allowances 135.21 Prepayments 20,831,580.65 Total 432,670,377.99 Deferred Debits and Other 16,234,169.32 Unamortized Loss on Bonds 12,257,456.64 Accumulated Deferred Income Taxes 219,479,984.07 Deferred Regulatory Assets 370,609,867.36 Other Deferred Debits 4,563,757.46 Total 623,145,234.85		
Nonutility Property - Less Reserve	Investments	
Special Funds	Ohio Valley Electric Corporation	594,286.00
Total	Nonutility Property - Less Reserve	840,343.03
Current and Accrued Assets 9,156,293.95 Cash	Special Funds	84,690,591.00
Current and Accrued Assets 9,156,293.95 Cash		
Cash. 9,156,293.95 Temporary Cash Investments. - Accounts Receivable - Less Reserve. 231,272,243.18 Notes Receivable 2,064,132.00 Accounts Receivable from Associated Companies. 34,846,261.54 Materials and Supplies - At Average Cost 31,509,061.35 Fuel. 31,509,061.35 Plant Materials and Operating Supplies. 48,158,123.22 Stores Expense. 648,058.10 Gas Stored Underground. 54,184,488.79 Emission Allowances. 135.21 Prepayments. 20,831,580.65 Total. 432,670,377.99 Deferred Debits and Other 16,234,169.32 Unamortized Loss on Bonds. 12,257,456.64 Accumulated Deferred Income Taxes. 219,479,984.07 Deferred Regulatory Assets. 370,609,867.36 Other Deferred Debits. 4,563,757.46 Total. 623,145,234.85	Total	86,125,220.03
Cash. 9,156,293.95 Temporary Cash Investments. - Accounts Receivable - Less Reserve. 231,272,243.18 Notes Receivable 2,064,132.00 Accounts Receivable from Associated Companies. 34,846,261.54 Materials and Supplies - At Average Cost 31,509,061.35 Fuel. 31,509,061.35 Plant Materials and Operating Supplies. 48,158,123.22 Stores Expense. 648,058.10 Gas Stored Underground. 54,184,488.79 Emission Allowances. 135.21 Prepayments. 20,831,580.65 Total. 432,670,377.99 Deferred Debits and Other 16,234,169.32 Unamortized Loss on Bonds. 12,257,456.64 Accumulated Deferred Income Taxes. 219,479,984.07 Deferred Regulatory Assets. 370,609,867.36 Other Deferred Debits. 4,563,757.46 Total. 623,145,234.85		
Temporary Cash Investments-Accounts Receivable - Less Reserve.231,272,243.18Notes Receivable.2,064,132.00Accounts Receivable from Associated Companies.34,846,261.54Materials and Supplies - At Average Cost31,509,061.35Fuel.31,509,061.35Plant Materials and Operating Supplies.48,158,123.22Stores Expense.648,058.10Gas Stored Underground.54,184,488.79Emission Allowances.135.21Prepayments.20,831,580.65Total.432,670,377.99Deferred Debits and Other16,234,169.32Unamortized Debt Expense.16,234,169.32Unamortized Loss on Bonds.12,257,456.64Accumulated Deferred Income Taxes.219,479,984.07Deferred Regulatory Assets.370,609,867.36Other Deferred Debits.4,563,757.46Total.623,145,234.85	Current and Accrued Assets	
Accounts Receivable - Less Reserve	Cash	9,156,293.95
Notes Receivable.2,064,132.00Accounts Receivable from Associated Companies.34,846,261.54Materials and Supplies - At Average Cost31,509,061.35Fuel.31,509,061.35Plant Materials and Operating Supplies.48,158,123.22Stores Expense.648,058.10Gas Stored Underground.54,184,488.79Emission Allowances.135.21Prepayments.20,831,580.65Total.432,670,377.99Deferred Debits and Other16,234,169.32Unamortized Loss on Bonds.12,257,456.64Accumulated Deferred Income Taxes.219,479,984.07Deferred Regulatory Assets.370,609,867.36Other Deferred Debits.4,563,757.46Total.623,145,234.85	Temporary Cash Investments	-
Accounts Receivable from Associated Companies34,846,261.54Materials and Supplies - At Average Cost31,509,061.35Fuel	Accounts Receivable - Less Reserve	231,272,243.18
Materials and Supplies - At Average Cost 31,509,061.35 Fuel. 31,509,061.35 Plant Materials and Operating Supplies. 48,158,123.22 Stores Expense. 648,058.10 Gas Stored Underground. 54,184,488.79 Emission Allowances. 135.21 Prepayments. 20,831,580.65 Total. 432,670,377.99 Deferred Debits and Other 16,234,169.32 Unamortized Debt Expense. 16,234,169.32 Unamortized Loss on Bonds. 12,257,456.64 Accumulated Deferred Income Taxes. 219,479,984.07 Deferred Regulatory Assets. 370,609,867.36 Other Deferred Debits. 4,563,757.46 Total. 623,145,234.85	Notes Receivable	2,064,132.00
Fuel. 31,509,061.35 Plant Materials and Operating Supplies. 48,158,123.22 Stores Expense. 648,058.10 Gas Stored Underground. 54,184,488.79 Emission Allowances. 135.21 Prepayments. 20,831,580.65 Total. 432,670,377.99 Deferred Debits and Other 16,234,169.32 Unamortized Loss on Bonds. 12,257,456.64 Accumulated Deferred Income Taxes. 219,479,984.07 Deferred Regulatory Assets. 370,609,867.36 Other Deferred Debits. 4,563,757.46 Total. 623,145,234.85	Accounts Receivable from Associated Companies	34,846,261.54
Plant Materials and Operating Supplies. 48,158,123.22 Stores Expense. 648,058.10 Gas Stored Underground. 54,184,488.79 Emission Allowances. 135.21 Prepayments. 20,831,580.65 Total. 432,670,377.99 Deferred Debits and Other 16,234,169.32 Unamortized Debt Expense. 16,234,169.32 Unamortized Loss on Bonds. 12,257,456.64 Accumulated Deferred Income Taxes. 219,479,984.07 Deferred Regulatory Assets. 370,609,867.36 Other Deferred Debits. 4,563,757.46 Total. 623,145,234.85	Materials and Supplies - At Average Cost	
Stores Expense	Fuel	31,509,061.35
Gas Stored Underground	Plant Materials and Operating Supplies	48,158,123.22
Emission Allowances 135.21 Prepayments 20,831,580.65 Total 432,670,377.99 Deferred Debits and Other 432,670,377.99 Unamortized Debt Expense 16,234,169.32 Unamortized Loss on Bonds 12,257,456.64 Accumulated Deferred Income Taxes 219,479,984.07 Deferred Regulatory Assets 370,609,867.36 Other Deferred Debits 4,563,757.46 Total 623,145,234.85	Stores Expense	648,058.10
Prepayments. 20,831,580.65 Total. 432,670,377.99 Deferred Debits and Other 16,234,169.32 Unamortized Debt Expense. 16,234,169.32 Unamortized Loss on Bonds. 12,257,456.64 Accumulated Deferred Income Taxes. 219,479,984.07 Deferred Regulatory Assets. 370,609,867.36 Other Deferred Debits. 4,563,757.46 Total. 623,145,234.85	Gas Stored Underground	54,184,488.79
Total	Emission Allowances	135.21
Deferred Debits and Other 16,234,169.32 Unamortized Debt Expense. 12,257,456.64 Accumulated Deferred Income Taxes. 219,479,984.07 Deferred Regulatory Assets. 370,609,867.36 Other Deferred Debits. 4,563,757.46 Total. 623,145,234.85	Prepayments	20,831,580.65
Deferred Debits and Other 16,234,169.32 Unamortized Debt Expense. 12,257,456.64 Accumulated Deferred Income Taxes. 219,479,984.07 Deferred Regulatory Assets. 370,609,867.36 Other Deferred Debits. 4,563,757.46 Total. 623,145,234.85		
Unamortized Debt Expense. 16,234,169.32 Unamortized Loss on Bonds. 12,257,456.64 Accumulated Deferred Income Taxes. 219,479,984.07 Deferred Regulatory Assets. 370,609,867.36 Other Deferred Debits. 4,563,757.46 Total. 623,145,234.85	Total	 432,670,377.99
Unamortized Debt Expense. 16,234,169.32 Unamortized Loss on Bonds. 12,257,456.64 Accumulated Deferred Income Taxes. 219,479,984.07 Deferred Regulatory Assets. 370,609,867.36 Other Deferred Debits. 4,563,757.46 Total. 623,145,234.85		
Unamortized Loss on Bonds 12,257,456.64 Accumulated Deferred Income Taxes 219,479,984.07 Deferred Regulatory Assets		
Accumulated Deferred Income Taxes. 219,479,984.07 Deferred Regulatory Assets. 370,609,867.36 Other Deferred Debits. 4,563,757.46 Total. 623,145,234.85	•	
Deferred Regulatory Assets		
Other Deferred Debits		, ,
Total		
	Other Deferred Debits	 4,563,757.46
Total Assets	Total	 623,145,234.85
	Total Assets	\$ 7,163,846,946.43

Liabilities and Proprietary Capital

Proprietary Capital	
Common Stock	\$ 425,170,424.09
Less: Common Stock Expense	835,888.64
Paid-In Capital	803,081,499.00
Retained Earnings	1,462,933,474.72
Total Proprietary Capital	2,690,349,509.17
Other Long-Term Debt	2,020,295,681.38
Total Long-Term Debt	2,020,295,681.38
Total Capitalization	4,710,645,190.55
Current and Accrued Liabilities	
ST Notes Payable to Associated Companies	324,069,725.21
Notes Payable	68,992,123.06
Accounts Payable	168,734,925.14
Accounts Payable to Associated Companies	30,915,994.66
Customer Deposits	31,873,036.05
Taxes Accrued	34,448,702.53
Interest Accrued	14,943,461.42
Miscellaneous Current and Accrued Liabilities	48,576,591.72
Total	722,554,559.79
Deferred Credits and Other	
Accumulated Deferred Income Taxes	970,544,440.27
Investment Tax Credit	32,168,275.24
Regulatory Liabilities	558,446,619.13
Customer Advances for Construction	5,963,491.56
Asset Retirement Obligations	92,322,159.47
Other Deferred Credits	2,760,127.18
Miscellaneous Long-Term Liabilities	14,135,572.96
Accum Provision for Pension & Postretirement Benefits	54,306,510.28
Total	1,730,647,196.09
Total Liabilities and Stockholders' Equity	\$ 7,163,846,946.43

Louisville Gas and Electric Company Analysis of Retained Earnings December 31, 2021

	Year Ended
	December 31, 2021
Balance at Beginning of Period	\$ 1,405,810,020.62
Add:	
Net Income for Period	249,123,454.10
Deduct:	
Adjustment to Retained Earnings	-
Common Dividends	
Common Stock Without Par Value	192,000,000.00
Balance at End of Period	\$ 1,462,933,474.72

LOUISVILLE GAS AND ELECTRIC COMPANY

то

THE BANK OF NEW YORK MELLON,

Trustee

Supplemental Indenture No. 5 dated as of September 1, 2016

Supplemental to the Indenture dated as of October 1, 2010

Establishing

First Mortgage Bonds, Collateral Series 2016TCA

SUPPLEMENTAL INDENTURE NO. 5

SUPPLEMENTAL INDENTURE No. 5, dated as of the first day of September, 2016, made and entered into by and between LOUISVILLE GAS AND ELECTRIC COMPANY, a corporation duly organized and existing under the laws of the Commonwealth of Kentucky, having its principal corporate offices at 220 West Main Street, Louisville, Kentucky 40202 (hereinafter sometimes called the "Company"), and THE BANK OF NEW YORK MELLON, a New York banking corporation, having its corporate trust office at 500 Ross Street, 12th Floor, Pittsburgh, Pennsylvania 15262 and having its principal place of business at 225 Liberty Street, New York, New York 10281 (hereinafter sometimes called the "Trustee"), as Trustee under the Indenture, dated as of October 1, 2010 (hereinafter called the "Original Indenture"), between the Company and said Trustee, as heretofore supplemented, this Supplemental Indenture No. 5 being supplemental thereto. The Original Indenture, as heretofore supplemented, and this Supplemental Indenture No. 5 are hereinafter sometimes, collectively, called the "Indenture."

Recitals of the Company

The Original Indenture was authorized, executed and delivered by the Company to provide for the issuance from time to time of its Securities (such term and all other capitalized terms used herein without definition having the meanings assigned to them in the Original Indenture), to be issued in one or more series as contemplated therein, and to provide security for the payment of the principal of and premium, if any, and interest, if any, on such Securities.

The Company has heretofore executed and delivered supplemental indentures for the purpose of creating series of Securities as set forth in Exhibit A hereto.

The Original Indenture and Supplemental Indentures No. 1, No. 2 and No. 3, and financing statements in respect thereof, have been duly recorded and filed in the various official records in the Commonwealth of Kentucky as set forth in Supplemental Indenture No. 4.

Supplemental Indenture No. 4 has been duly recorded and filed in the various official records in the Commonwealth of Kentucky as set forth in Exhibit B hereto.

Pursuant to Article Three of the Original Indenture, the Company wishes to establish a series of Securities, such series of Securities to be hereinafter sometimes called "Securities of Series No. 7".

As contemplated in Section 301 of the Original Indenture, the Company further wishes to establish the designation and certain terms of the Securities of Series No. 7. The Company has duly authorized the execution and delivery of this Supplemental Indenture No. 5 to establish the designation and certain terms of such series of Securities and has duly authorized the issuance of such Securities; and all acts necessary to make this Supplemental Indenture No. 5 a valid agreement of the Company, and to make the Securities No. 7 valid obligations of the Company, have been performed.

NOW, THEREFORE, THIS SUPPLEMENTAL INDENTURE NO. 5 WITNESSETH, that, for and in consideration of the premises and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and in order to secure the payment of the principal of and premium, if any, and interest, if any, on all Securities from time to time Outstanding and the performance of the covenants therein and in the Indenture contained, the Company hereby grants, bargains, sells, conveys, assigns, transfers, mortgages, pledges, sets over and confirms to the Trustee, and grants to the Trustee a security interest in and lien on, the real property specifically referred to in Exhibit C attached hereto and incorporated herein by reference and all right, title and interest of the Company in and to all property personal and mixed located thereon (other than Excepted Property), as and to the extent, and

Exhibit 3 - Supplemental Indenture No. 5 Page 3 of 13

subject to the terms and conditions, set forth in the Original Indenture, as heretofore amended; and it is further mutually covenanted and agreed, for the benefit of the Holders of the Securities of Series No. 7, as follows:

ARTICLE ONE

SECURITIES OF SERIES NO. 7

SECTION 101. Creation of Series No. 7.

There is hereby created a series of Securities designated "First Mortgage Bonds, Collateral Series 2016TCA", and the Securities of such series shall:

(a) be issued in the aggregate principal amount of \$125,000,000 and shall be limited to such aggregate principal amount (except as contemplated in Section 301(b) of the Original Indenture);

(b) be dated September 15, 2016;

(c) have a Stated Maturity of September 1, 2044, subject to prior redemption by the Company;

(d) have such additional terms as are established in an Officer's Certificate as contemplated in Section 301 of the Original Indenture; and

(e) be in substantially the form or forms established therefor in an Officer's Certificate, as contemplated by Section 201 of the Original Indenture.

ARTICLE TWO

MISCELLANEOUS PROVISIONS

SECTION 201. Single Instrument.

This Supplemental Indenture No. 5 is an amendment and supplement to the Original Indenture as heretofore amended and supplemented. As amended and supplemented by this Supplemental Indenture No. 5, the Original Indenture, as heretofore supplemented, is in all respects ratified, approved and confirmed, and the Original Indenture, as heretofore supplemented, and this Supplemental Indenture No. 5 shall together constitute the Indenture.

SECTION 202. Trustee.

The Trustee accepts the amendment of the Original Indenture effected by this Supplemental Indenture No. 5 upon the terms and conditions set forth in the Original Indenture, as heretofore amended and supplemented, including the terms and provisions defining and limiting the liabilities and responsibilities of the Trustee, which terms and provisions shall in like manner define and limit its liabilities and responsibilities in the performance of the trust created by the Original Indenture, as heretofore amended and supplemented, and as hereby amended. The Recitals of the Company contained in this Supplemental Indenture No. 5 shall be taken as the statements of the Company, and the Trustee assumes no responsibility for their correctness and makes no representations as to the validity or sufficiency of this Supplemental Indenture No. 5:

SECTION 203. Effect of Headings.

The Article and Section headings in this Supplemental Indenture No. 5 are for convenience only and shall not affect the construction hereof.

This instrument may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, but all such counterparts shall together constitute but one and the same instrument.

Exhibit 3 - Supplemental Indenture No. 5 Page 5 of 13

IN WITNESS WHEREOF, the parties hereto have caused this Supplemental Indenture No. 5 to be duly executed as of the day and year first written above.

LOUISVILLE GAS AND ELECTRIC COMPANY By: yan Name: Daniel K. Arboug

Title: Treasurer

ATTEST: Name: Gerald A. Reynolds

Title: General Counsel, Chief Compliance Officer and Corporate Secretary

[Signature Page to Supplemental Indenture No. 5 - Louisville Gas and Electric Utilities Company]

Exhibit 3 - Supplemental Indenture No. 5 Page 6 of 13

THE BANK OF NEW YORK MELLON, as Trustee

reard By: ৮

Name: Francine Kincaid Title: Vice President

[Signature Page to Supplemental Indenture No. 5 – Louisville Gas and Electric Company]

COMMONWEALTH OF KENTUCKY)) ss.:

COUNTY OF JEFFERSON

On this day of September, 2016, before me, a notary public, the undersigned, personally appeared Daniel K. Arbough, who acknowledged himself to be the Treasurer of LOUISVILLE GAS AND ELECTRIC COMPANY, a corporation of the Commonwealth of Kentucky and that he, as such Treasurer, being authorized to do so, executed the foregoing instrument for the purposes therein contained, by signing the name of the corporation by himself as Treasurer.

In witness whereof, I hereunto set my hand and official seal.

Buily Millitter BRIN Notary Public STATE OF KENTUCKY NOTARY MY COMMISSION EXPIRES: June 21, 2018

STATE OF NEW YORK)) ss.: COUNTY OF NEW YORK)

On this 1st day of September, 2016, before me, a notary public, the undersigned, personally appeared Francine Kincaid, who acknowledged herself to be a Vice President of THE BANK OF NEW YORK MELLON, a corporation and that she, as Vice President, being authorized to do so, executed the foregoing instrument for the purposes therein contained, by signing the name of the corporation by herself as Vice President.

In witness whereof, I hereunto set my hand and official seal,

Bv: Christopher J. Traina

Notary Public – State of New York No. 01TR6297825 Qualified in Queens County Certified in New York County My Commission Expires March 03, 2018

The Bank of New York Mellon hereby certifies that its precise name and address as Trustee hereunder are:

The Bank of New York Mellon 500 Ross Street, 12th Floor Pittsburgh, Pennsylvania 15262 Attn: Corporate Trust Administration

THE BANK OF NEW YORK MELLON, as Trustee

ane frand

Name: Francine Kincaid Title: Vice President

[Signature Page to Supplemental Indenture No. 5 – Louisville Gas and Electric Company]

Exhibit 3 - Supplemental Indenture No. 5 Page 9 of 13

CERTIFICATE OF PREPARER

The foregoing instrument was prepared by:

James J. Dimas, Senior Corporate Attorney Louisville Gas and Electric Company 220 West Main Street Louisville, Kentucky 40202

James J. Dimas

[Signature Page to Supplemental Indenture No. 5 – Louisville Gas and Electric Utilities Company]

Exhibit 3 - Supplemental Indenture No. 5 Page 10 of 13

EXHIBIT A

LOUISVILLE GAS AND ELECTRIC COMPANY

Bonds Issued and Outstanding under the Indenture

Supplemental Indenture No.	Dated as of	<u>Series</u> <u>No.</u>	Series Designation	Date of Securities	Principal <u>Amount Issued</u>	Principal Amount Outstanding ¹
1	October 15, 2010	1	Collateral Series 2010	October 20, 2010	\$574,304,000	\$574,304,000
2	November 1, 2010	2	1,625% Series due 2015	November 16, 2010	\$250,000,000	None
		3	5,125% Series due 2040	November 16, 2010	\$285,000,000	\$285,000,000
3	November 1, 2013	4	4.65% Series due 2043	November 14, 2013	\$250,000,000	\$250,000,000
.4	September 1, 2015	5	3.300% Series due 2025	September 28, 2015	\$300,000,000	\$300,000,000
÷		6	4.375% Series due 2045	September 28, 2015	\$250,000,000	\$250,000,000

¹ As of September 1, 2016.

EXHIBIT B

LOUISVILLE GAS AND ELECTRIC COMPANY

Filing and Recording of Supplemental Indenture No. 4, dated as of September 1, 2015, to Indenture, dated as of October 1, 2010

COUNTY	MORTGAGE BOOK	PAGE NUMBER
Breckenridge	420	669
Bullitt	M1609	744757
Clark	M813	386-399
Green	M298	161-174
Hardin	2140	938
Hart	M363	496-509
Henry	M334	55-68
Jefferson	14276	835
Larue	343	.631
Meade	M780	449-462
Metcalfe	166	620
Mulenberg	M670	60-73
Nelson	M1078	190-203
Oldham	M2177	817-830
Shelby	M986	576-589
Trimble	M205	401-414

Exhibit 3 - Supplemental Indenture No. 5 Page 12 of 13

EXHIBIT C

LOUISVILLE GAS AND COMPANY

REAL PROPERTY

Schedule of real property owned in fee located in the Commonwealth of Kentucky

That certain real property located in Jefferson County, Kentucky, as described below per the physical survey prepared by David L. King II, AGE Engineering Services, Inc., Ky. R.L.S. #3916, dated the 4th day of December, 2015, and a copy of which survey plat is also attached hereto as Exhibit B to the Deed of record in Deed Book 10523, Page 416 in the Office of the Clerk of Jefferson County, Kentucky:

BEGINNING at a 2 ¹/₂" x ¹/₄" Mag nail with 2" Aluminum Washer stamped "PLS 3916" set in the centerline of Billtown Road, said Mag Nail being the Northwest Comer of the property being surveyed and having Kentucky State Plane North Zone Coordinates (NAD83) of N=241,849.167 E=1,263,424.408 and said Mag Nail being approximately 435' North of the Intersection of centerlines of Billtown Road and Arbor Wood Drive, lying in Jefferson County, Kentucky and being the POINT OF BEGINNING for this description;

Thence leaving the centerline of Billtown Road and with first right-of-way dedicated to Billtown Road per Plat recorded in Deed Book 9777, Page 541, secondly the Southeastern line of Larry David Tyler et. al. (D.B. 9777, Page 547) and thirdly right-of-way rededicated to Tarrence Road per Plat recorded in Deed Book 9777, Page 541, N54°34'50"E- passing an iron pin found PLS# 3125 at 60.68 feet and continuing at the same bearing an additional 121.72 feet to an iron pin found PLS# 3125 and continuing an additional 439.55 feet for a total distance of 621.95 feet to a 2 $\frac{1}{2}$ " x $\frac{1}{4}$ " Mag nail set with a 2" Aluminum Washer stamped "PLS 3916" in the asphalt pavement of Tarrence Road, said nail being on the Southeastern line of Tract IV dedicated to Tarrence Road right-of-way by plat recorded in Deed Book 9777, Pg. 541;

Thence leaving Tract IV dedicated to Tarrence Road right-of-way and with the southern line of first David B. Shelton (D.B. 6821, Pg. 444), secondly David Shelton (D.B. 7553, Pg. 67), thirdly Stanley E. Lanham (D.B. 6026, Pg. 682) and fourthly Mark Edward Johnson (D.B. 7832, Pg. 180), S88°37'47"E - passing an iron witness pin set (5/8" x 18" rebar with aluminum cap bearing PLS-3916, as will be typical for all set comer monuments), at 43.94 feet and continuing at the same bearing 644.30 feet to a $\frac{1}{4}$ " Iron pipe found and continuing an additional 92.35 feet for total distance of 730.59 feet to a Stone Monument found, said stone being a 3-way corner of the tract being surveyed, Mark Edward Johnson and Lot 102 of Billtown Farms – Section 1 (Plat Book 47, Pg. 83);

Thence leaving the line of Mark Edward Johnson and with the Western line of first Lot 102 of Billtown Farms – Section 1 and secondly Lot 63 of Billtown Farms – Section 1 (Plat Book 47, Pg. 82), S22°02'13"W- passing a 5/8" Rebar No ID Cap at 417.01 feet and continuing at the same being 123.01 feet to an Iron Pin Found PLS# 3476 and continuing an additional101.68 feet for a total distance of 641.70 feet to an Iron Pin Found PLS# 2719, said pin being on the Western boundary line of Lot 63 of Billtown Farms Section 1 and being the Northeast Corner of Deborah M. Pinson (D.B. 7298, Pg. 841);

Thence leaving the line of Lot 63 of Billtown Farms Section 1 and with the line of Deborah M. Pinson, $S84^{\circ}43'26''W - 512.75$ feet to a ½" Rebar Found (PLS# 3492 Winkle), said pin being on the Northern boundary line of Pinson and being the Southeast corner of Patrick McGlinchey (D.B. 9844, Pg. 269);

Thence leaving the line of Pinson and with the line of McGlinchey, N14°09'28"W – 124.16 feet to a $\frac{1}{2}$ " Rebar Found (PLS# 3492 Winkle), said pin being the Northeast corner of McGlinchey and being the Southeast corner of Louisville Water Company (D.B. 4046, Pg. 577);

Thence leaving the line of McGlinchey and with the line of Louisville Water Company, N26°04'02"W – passing iron pin found no ID Cap at 82.69 feet and continuing at the same bearing 109.82 feet for a total distance of 192.51 feet to a ½" Rebar Found, said pin being the Northeast Corner of the Louisville Water Company;

Thence continuing with the line of the Louisville Water Company, $S84^{\circ}43'26''W$ – passing an iron witness pin set at 309.26 feet and continuing at the same bearing and additional 89.08 feet for a total distance of 398.34 feet to a 2 ½" x ¼" Mag nail with 2" Aluminum Washer stamped "PLS 3916" set in the centerline of Billtown Road;

Thence leaving the line of Louisville Water Company and with the centerline of Billtown Road, $N29^{\circ}08'38''W - 49.79$ feet to the Point of Beginning and containing 11.974 acres by survey.

All bearing are referenced to Grid North of the Kentucky State Plane Coordinate System – North Zone (NAD 83).

Being the same property conveyed to Louisville Gas and Electric Company, a Kentucky corporation, by Deed dated December 21, 2015, of record in Deed Book 10523, Page 416, in the Office of the County Clerk of Jefferson County, Kentucky.

LOUISVILLE GAS AND ELECTRIC COMPANY

ТО

THE BANK OF NEW YORK MELLON,

Trustee

Supplemental Indenture No. 6 dated as of May 15, 2017

Supplemental to the Indenture dated as of October 1, 2010

Establishing

First Mortgage Bonds, Collateral Series 2017TCA
SUPPLEMENTAL INDENTURE NO. 6

SUPPLEMENTAL INDENTURE No. 6, dated as of the fifteenth day of May, 2017, made and entered into by and between LOUISVILLE GAS AND ELECTRIC COMPANY, a corporation duly organized and existing under the laws of the Commonwealth of Kentucky, having its principal corporate offices at 220 West Main Street, Louisville, Kentucky 40202 (hereinafter sometimes called the "Company"), and THE BANK OF NEW YORK MELLON, a New York banking corporation, having its corporate trust office at 500 Ross Street, 12th Floor, Pittsburgh, Pennsylvania 15262 and having its principal place of business at 225 Liberty Street, New York, New York 10281 (hereinafter sometimes called the "Original Indenture"), between the Company and said Trustee, as heretofore supplemented, this Supplemental Indenture No. 6 being supplemental thereto. The Original Indenture, as heretofore supplemental Indenture."

Recitals of the Company

The Original Indenture was authorized, executed and delivered by the Company to provide for the issuance from time to time of its Securities (such term and all other capitalized terms used herein without definition having the meanings assigned to them in the Original Indenture), to be issued in one or more series as contemplated therein, and to provide security for the payment of the principal of and premium, if any, and interest, if any, on such Securities.

The Company has heretofore executed and delivered supplemental indentures for the purpose of creating series of Securities as set forth in Exhibit A hereto.

The Original Indenture and Supplemental Indentures Nos. 1 through 4, and financing statements in respect thereof, have been duly recorded and filed in the various official records in the Commonwealth of Kentucky as set forth in Supplemental Indenture No. 5.

Supplemental Indenture No. 5 has been duly recorded and filed in the various official records in the Commonwealth of Kentucky as set forth in Exhibit B hereto.

Pursuant to Article Three of the Original Indenture, the Company wishes to establish a series of Securities, such series of Securities to be hereinafter sometimes called "Securities of Series No. 8".

As contemplated in Section 301 of the Original Indenture, the Company further wishes to establish the designation and certain terms of the Securities of Series No. 8. The Company has duly authorized the execution and delivery of this Supplemental Indenture No. 6 to establish the designation and certain terms of such series of Securities and has duly authorized the issuance of such Securities; and all acts necessary to make this Supplemental Indenture No. 6 a valid agreement of the Company, and to make the Securities No. 8 valid obligations of the Company, have been performed.

NOW, THEREFORE, THIS SUPPLEMENTAL INDENTURE NO. 6 WITNESSETH, that, for and in consideration of the premises and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, it is mutually covenanted and agreed, for the benefit of the Holders of the Securities of Series No. 8, as follows:

ARTICLE ONE

SECURITIES OF SERIES NO. 8

SECTION 101. Creation of Series No. 8.

There is hereby created a series of Securities designated "First Mortgage Bonds, Collateral Series 2017TCA", and the Securities of such series shall:

(a) be issued in the aggregate principal amount of \$60,000,000 and shall be limited to such aggregate principal amount (except as contemplated in Section 301(b) of the Original Indenture);

(b) be dated June 1, 2017;

(c) have a Stated Maturity of June 1, 2033, subject to prior redemption by the Company;

(d) have such additional terms as are established in an Officer's Certificate as contemplated in Section 301 of the Original Indenture; and

(e) be in substantially the form or forms established therefor in an Officer's Certificate, as contemplated by Section 201 of the Original Indenture.

ARTICLE TWO

MISCELLANEOUS PROVISIONS

SECTION 201. Single Instrument.

This Supplemental Indenture No. 6 is an amendment and supplement to the Original Indenture as heretofore amended and supplemented. As amended and supplemented by this Supplemental Indenture No. 6, the Original Indenture, as heretofore supplemented, is in all respects ratified, approved and confirmed, and the Original Indenture, as heretofore supplemented, and this Supplemental Indenture No. 6 shall together constitute the Indenture.

SECTION 202. Trustee.

The Trustee accepts the amendment of the Original Indenture effected by this Supplemental Indenture No. 6 upon the terms and conditions set forth in the Original Indenture, as heretofore amended and supplemented, including the terms and provisions defining and limiting the liabilities and responsibilities of the Trustee, which terms and provisions shall in like manner define and limit its liabilities and responsibilities in the performance of the trust created by the Original Indenture, as heretofore amended and supplemented, and as hereby amended. The Recitals of the Company contained in this Supplemental Indenture No. 6 shall be taken as the statements of the Company, and the Trustee assumes no responsibility for their correctness and makes no representations as to the validity or sufficiency of this Supplemental Indenture No. 6.

SECTION 203. Effect of Headings.

The Article and Section headings in this Supplemental Indenture No. 6 are for convenience only and shall not affect the construction hereof.

This instrument may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, but all such counterparts shall together constitute but one and the same instrument.

IN WITNESS WHEREOF, the parties hereto have caused this Supplemental Indenture No. 6 to be duly executed on the May of May, 2017.

LOUISVILLE GAS AND ELECTRIC COMPANY By: Name: Daniel K. Arbough

Title: Treasurer

ATTEST: Name: Gerald A. Reynolds

Title: General Counsel, Chief Compliance Officer and Corporate Secretary

[Signature Page to Supplemental Indenture No. 6 – Louisville Gas and Electric Utilities Company]

THE BANK OF NEW YORK MELLON, as Trustee

sie frait By: 💆

Name: Francine Kincaid
Title: Vice President

[Signature Page to Supplemental Indenture No. 6 – Louisville Gas and Electric Company]

COMMONWEALTH OF KENTUCKY

COUNTY OF JEFFERSON

On this day of May, 2017, before me, a notary public, the undersigned, personally appeared Daniel K. Arbough, who acknowledged himself to be the Treasurer of LOUISVILLE GAS AND ELECTRIC COMPANY, a corporation of the Commonwealth of Kentucky and that he, as such Treasurer, being authorized to do so, executed the foregoing instrument for the purposes therein contained, by signing the name of the corporation by himself as Treasurer.

In witness whereof, I hereunto set my hand and official seal.

) ss.:

)

Dristy Jotary Public



[Signature Page to Supplemental Indenture No. 6 – Louisville Gas and Electric Company]

STATE OF NEW YORK)) 55.; COUNTY OF NEW YORK)

On this 18^{2} day of May, 2017, before me, a notary public, the undersigned, personally appeared Francine Kincaid, who acknowledged herself to be a Vice President of THE BANK OF NEW YORK MELLON, a corporation and that she, as Vice President, being authorized to do so, executed the foregoing instrument for the purposes therein contained, by signing the name of the corporation by herself as Vice President.

In witness whereof, I hereunto set my hand and official seal

By: Christopher /. Traina

Notary Public – State of New Yor No. 01TR6297825 Qualified in Queens County Certified in New York County My Commission Expires March 03, 2018

The Bank of New York Mellon hereby certifies that its precise name and address as Trustee hereunder are:

The Bank of New York Mellon 500 Ross Street, 12th Floor Pittsburgh, Pennsylvania 15262 Attn: Corporate Trust Administration

THE BANK OF NEW YORK MELLON, as Trustee

rand

Name: Francine Kincaid Title: Vice President

[Signature Page to Supplemental Indenture No. 6 – Louisville Gas and Electric Company]

CERTIFICATE OF PREPARER

The foregoing instrument was prepared by:

James J. Dimas, Senior Corporate Attorney Louisville Gas and Electric Company 220 West Main Street Louisville, Kentucky 40202

James J. Dimas

[Signature Page to Supplemental Indenture No. 6 – Louisville Gas and Electric Utilities Company]

Exhibit 3 - Supplemental Indenture No. 6 Page 10 of 11

EXHIBIT A

LOUISVILLE GAS AND ELECTRIC COMPANY

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Supplemental <u>Indenture No.</u>	Dated as of	<u>Series</u> <u>No.</u>	Series Designation	Date of Securities	Principal <u>Amount Issued</u>	Principal Amount <u>Outstanding¹</u>
1	October 15, 2010	1	Collateral Series 2010	October 20, 2010	\$574,304,000	\$424,304,000
2	November 1, 2010	2	1.625% Series due 2015	November 16, 2010	\$250,000,000	None
		3	5.125% Series due 2040	November 16, 2010	\$285,000,000	\$285,000,000
3	November 1, 2013	4	4.65% Series due 2043	November 14, 2013	\$250,000,000	\$250,000,000
4	September 1, 2015	5	3.300% Series due 2025	September 28, 2015	\$300,000,000	\$300,000,000
		6	4.375% Series due 2045	September 28, 2015	\$250,000,000	\$250,000,000
5	September 1, 2016	7	Collateral Series 2016TCA	September 15, 2016	\$125,000,000	\$125,000,000

Bonds Issued and Outstanding under the Indenture

¹ As of May 15, 2017.

EXHIBIT B

LOUISVILLE GAS AND ELECTRIC COMPANY

Filing and Recording of Supplemental Indenture No. 5, dated as of September 1, 2016, to Indenture, dated as of October 1, 2010

COUNTY	MORTGAGE BOOK	PAGE NUMBER
Breckenridge	431	407
Bullitt	M1668	631-643
Clark	M835	692
Green	M304	231-243
Hardin	2174	204-216
Hart	M374	692
Henry	M342	66-78
Jefferson	14719	206-219
Larue	352	309
Meade	M810	20-32
Metcalfe	171	222
Muhlenberg	M683	453
Nelson	M1109	303-315
Oldham	M2224	819-831
Shelby	M1020	7
Trimble	M209	815

LOUISVILLE GAS AND ELECTRIC COMPANY

ТО

THE BANK OF NEW YORK MELLON,

Trustee

Supplemental Indenture No. 7 dated as of March 1, 2019

Supplemental to the Indenture dated as of October 1, 2010

Establishing

First Mortgage Bonds, 4.25% Series due 2049

Exhibit 3 - Supplemental Indenture No. 7 Page 2 of 17

SUPPLEMENTAL INDENTURE NO. 7

SUPPLEMENTAL INDENTURE No. 7, dated as of the first day of March 1, 2019, made and entered into by and between LOUISVILLE GAS AND ELECTRIC COMPANY, a corporation duly organized and existing under the laws of the Commonwealth of Kentucky, having its principal corporate offices at 220 West Main Street, Louisville, Kentucky 40202 (hereinafter sometimes called the "Company"), and THE BANK OF NEW YORK MELLON, a New York banking corporation, having its principal place of business and corporate trust office at 240 Greenwich Street, 7E, New York, New York 10286 (hereinafter sometimes called the "Trustee"), as Trustee under the Indenture, dated as of October 1, 2010 (hereinafter called the "Original Indenture"), between the Company and said Trustee, as heretofore supplemented, this Supplemental Indenture No. 7 being supplemental thereto. The Original Indenture, as heretofore supplemented, and this Supplemental Indenture No. 7 are hereinafter sometimes, collectively, called the "Indenture."

Recitals of the Company

The Original Indenture was authorized, executed and delivered by the Company to provide for the issuance from time to time of its Securities (such term and all other capitalized terms used herein without definition having the meanings assigned to them in the Original Indenture), to be issued in one or more series as contemplated therein, and to provide security for the payment of the principal of and premium, if any, and interest, if any, on such Securities.

The Company has heretofore executed and delivered supplemental indentures for the purpose of creating series of Securities as set forth in Exhibit A hereto.

The Original Indenture and Supplemental Indentures Nos. 1 through 5, and financing statements in respect thereof, have been duly recorded and filed in the various official records in the Commonwealth of Kentucky as set forth in Supplemental Indenture No. 6. Supplemental Indenture No. 6 has been duly recorded and filed in the various official records in the Commonwealth of Kentucky as set forth in Exhibit B hereto.

Pursuant to Article Three of the Original Indenture, the Company wishes to establish a series of Securities, such series of Securities to be hereinafter sometimes called "Securities of Series No. 9".

As contemplated in Section 301 of the Original Indenture, the Company further wishes to establish the designation and certain terms of the Securities of Series No. 9. The Company has duly authorized the execution and delivery of this Supplemental Indenture No. 7 to establish the designation and certain terms of such series of Securities and has duly authorized the issuance of such Securities; and all acts necessary to make this Supplemental Indenture No. 7 a valid agreement of the Company, and to make the Securities of Series No. 9 valid obligations of the Company, have been performed.

NOW, THEREFORE, THIS SUPPLEMENTAL INDENTURE NO. 7 WITNESSETH, that, for and in consideration of the premises and of the purchase of the Securities by the Holders thereof and in order to secure the payment of the principal of and premium, if any, and interest, if any, on all Securities from time to time Outstanding and the performance of the covenants therein and in the Indenture contained, the Company hereby grants, bargains, sells, conveys, assigns, transfers, mortgages, pledges, sets over and confirms to the Trustee, and grants to the Trustee a security interest in and lien on (a) the Company's right, title and interest in the real property specifically referred to in Exhibit C attached hereto and incorporated herein by reference and all right, title and interest of the Company in and to all property personal and mixed located thereon (other than Excepted Property) and (b) the Company's right title and interest in the generating facilities described in Exhibit D hereto, as and to the extent, and subject to the

Exhibit 3 - Supplemental Indenture No. 7 Page 3 of 17

terms and conditions, set forth in the Original Indenture; and it is further mutually covenanted and agreed as follows:

ARTICLE ONE

SECURITIES OF SERIES NO. 9

SECTION 101. Creation of Series No. 9.

There is hereby created a series of Securities designated "First Mortgage Bonds, 4.25% Series due 2049", and the Securities of such series shall:

(a) be issued initially in the aggregate principal amount of \$400,000,000 and shall be limited to such aggregate principal amount (except as contemplated in Section 301(b) of the Original Indenture); provided, however, that, as contemplated in the last paragraph of Section 301 of the Original Indenture, additional Securities of such series may be subsequently issued from time to time, without any consent of Holders of the Securities of such series, if and to the extent that, prior to each such subsequent issuance, the aggregate principal amount of the additional Securities then to be issued shall have been set forth in a Supplemental Indenture, and, thereupon, the Securities of such series shall be limited to such aggregate principal amount as so increased (except as aforesaid and subject to further such increases);

(b) be dated April 1, 2019;

(c) have a Stated Maturity of April 1, 2049, subject to prior redemption or purchase by the Company;

(d) have such additional terms as are established in an Officer's Certificate as contemplated in Section 301 of the Original Indenture; and

(e) be in substantially the form or forms established therefor in an Officer's Certificate, as contemplated by Section 201 of the Original Indenture.

ARTICLE TWO

COVENANT

SECTION 201. Satisfaction and Discharge.

The Company hereby agrees that, if the Company shall make any deposit of money and/or Eligible Obligations with respect to any Securities of Series No. 9, or any portion of the principal amount thereof, as contemplated by Section 901 of the Indenture, the Company shall not deliver an Officer's Certificate described in clause (z) in the first paragraph of said Section 901 unless the Company shall also deliver to the Trustee, together with such Officer's Certificate, either:

(a) an instrument wherein the Company, notwithstanding the satisfaction and discharge of its indebtedness in respect of such Securities, or portions of the principal amount thereof, shall retain the obligation (which shall be absolute and unconditional) to irrevocably deposit with the Trustee or Paying Agent such additional sums of money, if any, or additional Eligible Obligations (meeting the requirements of Section 901), if any, or any combination thereof, at such time or times, as shall be necessary, together with the money and/or Eligible Obligations theretofore so deposited, to pay when due the principal of and premium, if any, and

Exhibit 3 - Supplemental Indenture No. 7 Page 4 of 17

interest due and to become due on such Securities or portions thereof, all in accordance with and subject to the provisions of said Section 901; provided, however, that such instrument may state that the obligation of the Company to make additional deposits as aforesaid shall be subject to the delivery to the Company by the Trustee of a notice asserting the deficiency accompanied by an opinion of an independent public accountant of nationally recognized standing, selected by the Trustee, showing the calculation thereof (which opinion shall be obtained at the expense of the Company); or

(b) an Opinion of Counsel to the effect that the beneficial owners of such Securities, or portions of the principal amount thereof, will not recognize income, gain or loss for United States federal income tax purposes as a result of the satisfaction and discharge of the Company's indebtedness in respect thereof and will be subject to United States federal income tax on the same amounts, at the same times and in the same manner as if such satisfaction and discharge had not been effected.

ARTICLE THREE

MISCELLANEOUS PROVISIONS

SECTION 301. Single Instrument.

This Supplemental Indenture No. 7 is an amendment and supplement to the Original Indenture as heretofore amended and supplemented. As amended and supplemented by this Supplemental Indenture No. 7, the Original Indenture, as heretofore supplemented, is in all respects ratified, approved and confirmed, and the Original Indenture, as heretofore supplemented, and this Supplemental Indenture No. 7 shall together constitute the Indenture.

SECTION 302. Effect of Headings.

The Article and Section headings in this Supplemental Indenture No. 7 are for convenience only and shall not affect the construction hereof.

This instrument may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, but all such counterparts shall together constitute but one and the same instrument.

Exhibit 3 - Supplemental Indenture No. 7 Page 5 of 17

IN WITNESS WHEREOF, the parties hereto have caused this Supplemental Indenture No. 7 to be duly executed as of the day and year first written above.

LOUISVILLE GAS AND ELECTRIC COMPANY By: Name: Daniel K. Arbough Title: Treasurer

ATTES Timet stopher M. Garrett

Name: Ch**t**istopher M. Garr Title: Controller

Exhibit 3 - Supplemental Indenture No. 7 Page 6 of 17

THE BANK OF NEW YORK MELLON, as Trustee

By: Name: Laurence J. O'Brien Title: Vice President

[Signature Page to Supplemental Indenture No. 7 – Louisville Gas and Electric Company]

Exhibit 3 - Supplemental Indenture No. 7 Page 7 of 17

COMMONWEALTH OF KENTUCKY)	
)	ss.:
COUNTY OF JEFFERSON)	

On this day of March, 2019, before me, a notary public, the undersigned, personally appeared Daniel K. Arbough, who acknowledged himself to be the Treasurer of LOUISVILLE GAS AND ELECTRIC COMPANY, a corporation of the Commonwealth of Kentucky and that he, as such Treasurer, being authorized to do so, executed the foregoing instrument for the purposes therein contained, by signing the name of the corporation by himself as Treasurer.

In witness whereof, I hereunto set my hand and official seal.

Dinly Notary Public



STATE OF NEW JERSEY)) ss.: COUNTY OF PASSAIC)

On this 2^{12} day of March, 2019, before me, a notary public, the undersigned, personally appeared Laurence J. O'Brien, who acknowledged himself to be a Vice President of THE BANK OF NEW YORK MELLON, a corporation and that he, as Vice President, being authorized to do so, executed the foregoing instrument for the purposes therein contained, by signing the name of the corporation by himself as Vice President.

In witness whereof, I hereunto set my hand and official seal.

By:

Rosemarie Socorro-Garcia Notary Public – State of New Jersey My Commission Expires December 5, 2021

The Bank of New York Mellon hereby certifies that its precise name and address as Trustee hereunder are:

The Bank of New York Mellon 240 Greenwich Street, 7E New York, New York 10286 Attn: Corporate Trust Administration

THE BANK OF NEW YORK MELLON, as Trustee

By: me: Laurence J. O'Brien Title: Vice/President

[Signature Page to Supplemental Indenture No. 7 – Louisville Gas and Electric Company]

Exhibit 3 - Supplemental Indenture No. 7 Page 9 of 17

CERTIFICATE OF PREPARER

The foregoing instrument was prepared by:

James J. Dimas, Senior Corporate Attorney Louisville Gas and Electric Company 220 West Main Street Louisville, Kentucky 40202

~ James J. Dimas

Exhibit 3 - Supplemental Indenture No. 7 Page 10 of 17

EXHIBIT A

LOUISVILLE GAS AND ELECTRIC COMPANY

Bonds Issued and Outstanding under the Indenture

Supplemental Indenture No.	Dated as of	<u>Series</u> <u>No.</u>	Series Designation	Date of Securities	Principal <u>Amount Issued</u>	Principal Amount <u>Outstanding¹</u>
l	October 15, 2010	1	Collateral Series 2010	October 20, 2010	\$574,304,000	\$354,200,000
2	November 1, 2010	2	1.625% Series due 2015	November 16, 2010	\$250,000,000	\$0
		3	5.125% Series due 2040	November 16, 2010	\$285,000,000	\$285,000,000
3	November 1, 2013	4	4.65% Series due 2043	November 14, 2013	\$250,000,000	\$250,000,000
4	September 1, 2015	5	3.300%, Series due 2025	September 28, 2015	\$300,000,000	\$300,000,000
		6	4.375%, Series due 2045	September 28, 2015	\$250,000,000	\$250,000,000
5	September 1, 2016	7	Collateral Series 2016 TCA	September 15, 2016	\$125,000,000	\$125,000,000
6	May 15, 2017	8	Collateral Series 2017 TCA	June 1, 2017	\$60,000,000	\$60,000,000

¹ As of March 1, 2019.

Exhibit 3 - Supplemental Indenture No. 7 Page 11 of 17

EXHIBIT B

LOUISVILLE GAS AND ELECTRIC COMPANY

Filing and Recording of Supplemental Indenture No. 6, dated as of May 15, 2017, to Indenture, dated as of October 1, 2010

COUNTY	DEED BOOK	PAGE NO.	
Breckinridge	M440	355 - 365	
Bullitt	M1715	307-317	
Clark	M851	868-878	
Green	M309	281-291	
Hardin	M2198	1038 -1048	
Hart	M385	34 - 44	
Henry	M348	760-770	
Jefferson	M15069	76 - 87	
Larue	M359	705	
Meade	M832	257-267	
Metcalfe	M174	352	
Muhlenberg	M692	610-620	
Nelson	M1134	282 - 292	
Oldham	M2260	543-553	
Shelby	M1045	766-776	
Trimble	M213	585-595	

Exhibit 3 - Supplemental Indenture No. 7 Page 12 of 17

EXHIBIT C

LOUISVILLE GAS AND ELECTRIC COMPANY

Real Property

Schedule of real property owned in fee located in the Commonwealth of Kentucky

Jefferson County, Kentucky:

TRACT 1: BEGINNING at a concrete monument, which monument is in the Northeast corner of the tract of land conveyed to Sherley Terry and wife, by Deed recorded in Deed Book 2181, Page 294, in the Office of the Clerk of Jefferson County, Kentucky; which monument is also the Northwest corner of the tract of land conveyed to J. S. Shipley and wife, by Deed recorded in Deed Book 3229, page 449, in the office aforesaid; which concrete monument is further identified as being in the Southerly line of Valley Village Subdivision, Section Number One, as shown on plat of same, of record in Plat and Subdivision Book 13, Page 30, in the office aforesaid; thence South 31 degrees 30 minutes West 1237.50 feet with an existing fence line to a spike in the center line of Shipley Lane, which spike is approximately 2501.94 feet from the original center line of 18th Street Road as measured along the center line of Shipley Lane; thence with the center line of Shipley Lane, North 56 degrees 45 minutes West 570.60 feet to a pipe, corner to Robert A. Terry and wife; thence North 31 degrees 13 minutes East 177.90 feet to a monument another corner to Terry; thence North 56 degrees 45 minutes West 502.61 feet to a point; thence North 17 degrees 39 minutes East 1101.08 feet to a point in the North line of a tract containing 48.78 acres, more or less, conveyed to the Board of Education of Jefferson County, Kentucky, by Deed dated March 25, 1961, of record in Deed Book 3684, Page 527, in the office aforesaid; thence with said North line, South 56 degrees 40 minutes East 1,382.0 feet to the point of beginning.

TRACT 2: BEGINNING at the Northeast corner of the property acquired by the Board of Education of Jefferson County, Kentucky from Sherley Terry and wife, by Deed dated March 25, 1961, of record in Deed Book 3684, Page 527, in the Office of the Clerk of Jefferson County, Kentucky; thence Southwardly along the Easterly boundary line of said former Terry Farm for a distance of 100 feet and extending back between parallel lines, South 56 degrees 40 minutes East in the J.S. Shipley Farm for a distance of 107 feet to the Westerly line of Sandray Boulevard, of extended Southwardly in a straight line into the Shipley Farm, the Northerly boundary of said plot of ground to be acquired is coincident with the Southerly line of Valley Village Subdivision at this location.

TOGETHER WITH the right to use as a permanent easement for ingress and egress, roadway, water, gas, sewer drainage and other utility purposes over, across, under and through an additional tract of land, more particularly described as follows:

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TRACT 3: BEGINNING at the Northeast corner of the parcel above described (Tract 2) in the southerly line of Valley Village Subdivision at the intersection of the Westerly line of Sandray Boulevard; thence Southwardly along the Easterly line of the above described parcel (Tract 2) for a distance of 100 feet; thence extending back between parallel lines for a distance of 60 feet into the J.S. Shipley Farm, the Northerly boundary of said easement being coincident with the Southerly terminus boundary of Sandray Boulevard and the Easterly line of said easement being the straight extension of the Easterly line of Sandray Boulevard, if extended Southwardly.

TRACT 4: BEGINNING at a point in the Northeast line of the tract conveyed to Board of Education, by Deed of record in Deed Book 3684, Page 527, in the Office of the Clerk of Jefferson County, Kentucky; said point being South 56 degrees 40 minutes East 258.48 feet from the Northwest corner of the tract conveyed to the Jefferson County Community Improvement District, by Deed of record in Deed Book 4812, Page 996, in the office aforesaid; thence with lines of said last mentioned tract the following courses and distances: South 19 degrees 30 minutes 51 seconds West 65.65 feet; South 70 degrees 29 minutes 9 seconds East 25 feet; South 19 degrees 30 minutes 51 seconds West 583.71 feet; South 20 degrees 56 minutes 26 seconds West 42.21 feet; South 22 degrees 22 minutes 1 second West 591.85 feet to the Southwest line of tract conveyed to Board of Education, by Deed aforesaid; thence with said line, South 56 degrees 45 minutes East 681.91 feet to a corner of said tract; thence with same, North 31 degrees 13 minutes East 177.90 feet to the Southwest line of the tract conveyed to The County of Jefferson, Kentucky, by Deed of record in Deed Book 4009, Page 98, in the office aforesaid; thence with lines of said tract, North 56 degrees 45 minutes West 427.61 feet, and North 17 degrees 39 minutes East 1101.08 feet to the Northeast line of the tract conveyed to Board of Education, by Deed aforesaid; thence with same, North 56 degrees 40 minutes West 441.52 feet to the point of beginning.

TRACTS 1, 2, 3 and 4 BEING a portion of the same property conveyed to Louisville Gas and Electric Company by Deed dated December 8, 2017, of record in Deed Book 11043, Page 235, in the Office of the Clerk of Jefferson County, Kentucky.

Shelby County, Kentucky:

Being a tract of land situated on the south side of the R.J. Corman Railroad and on the east side of Conner Station Road in Shelby County, Kentucky and being more particularly described as follows:

Beginning at a set Railroad Spike in the center of Conner Station road and in the south right of way of the R.J. Corman Railroad, 33 feet south of the center of tracks; thence with the center of Conner Station Road South 18°19'57" East, a distance of 113.01 feet to a set Magnetic Nail with plastic disc stamped #2123 and being typical of set Magnetic Nails this survey; thence South 16°21'24" East, a distance of 152.42 feet to a set Magnetic Nail; thence South 14°39'40" East, a distance of 152.23 feet to the beginning of a curve concave to the northeast having a radius of 237.06 feet and a central angle of 27°54'33" and being subtended by a chord which bears South 32°45'59" East 114.33 feet; thence southerly and southeasterly along said curve, a distance of 115.47 feet to a set Magnetic Nail; thence South 50°44'47" East, a distance of 425.67 feet to a set

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Magnetic Nail and being a corner common to Tract 1 and 2; thence continuing with the center of said road along a curve to the right along a chord bearing of South 10°04'19" East, a chord distance of 160.32 feet and along the curve a distance of 169.43' to a set Magnetic Nail; thence South 18°23'26" West, a distance of 254.24 feet to a set Magnetic Nail; thence South 17°31'34" West, a distance of 200.05 feet to a set Magnetic Nail; thence South 19°17'16" West, a distance of 206.49 feet to a set Magnetic Nail and the beginning of a curve concave to the northwest having a radius of 1127.14 feet and a central angle of 13°01'04" and being subtended by a chord which bears South 24°00'23" West 255.54 feet; thence southerly and southwesterly along said curve, a distance of 256.09 feet to a set Magnetic Nail and being a corner common to Tract 2 and Tract 3 and the True Point of Beginning; thence with the line of Tract 3 South 73°11'03" East, a distance of 30.63 feet to a set rebar; thence South 73°11'03" East, a distance of 365.90 feet to a set rebar; thence South 74°23'30" East, a distance of 415.70 feet to a set rebar; thence North 18°53'29" East, a distance of 13.51 feet to a set rebar, thence South 77°02'05" East, a distance of 649.10 feet to a set rebar in the west line of Whitney Young Manpower Center property (Db 128, Pg. 391); thence with the line of Whitney Young South 08°07'55" West, a distance of 976.76 feet to a found 1/2 inch rebar of unknown origin, said rebar being in the North right of way of Interstate 64 as conveyed to the Commonwealth of Kentucky in Deed Book 146, Page 49; thence with said right of way North 73°48'42" West, a distance of 824.47 feet to a set rebar and being the beginning of a curve tangent to said line; thence westerly a distance of 974.30 feet along the curve concave to the south, having a radius of 11609.16 feet and a central angle of 4°48'31" to a point of cusp and a set magnetic nail in the concrete base of fence post; thence North 32°37'16" East, a distance of 76.83 feet to a set rebar; thence North 57°22'44" West, a distance of 30.00 feet to a set magnetic nail in the center of Conner Station Road; thence with the center of said road North 31°36'23" East, a distance of 257.13 feet to a set magnetic nail; thence North 29°26'34" East, a distance of 121.04 feet to a set magnetic nail; thence North 28°26'14" East, a distance of 522.14 feet to the point of beginning and containing 35.17 Acres.

BEING the same property conveyed to Louisville Gas and pursuant to Deed dated June 26, 2018, and recorded in Deed Book 639, Page 369 in the Office of the Clerk of Shelby County, Kentucky.

Trimble County, Kentucky:

Beginning at a point in the centerline of Ogden Ridge Road, said point being:

- The Northeast corner of property being described
- Being the Northwest corner of Howard Leach et. ux (D.B. 38, Pg. 489)
- N22°05'03"W 19.68 feet from a ½" Rebar Found PLS# 3868 on the eastern boundary line of the property being described
- having KY North Zone (NAD83) coordinates of N=401277.33 E=1312179.81
- lying near the community of Bedford, Trimble County, Kentucky
- and being the POINT OF BEGINNING for this description

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Thence leaving the centerline of Ogden Ridge Road and with the eastern boundary line of the property being described and the western boundary line Howard Leach et. ux (D.B. 38, Pg. 489), S22°05'03"E – passing an ½" Rebar Found PLS# 3868 at 19.68 feet and continuing 537.00 feet for a total distance of 556.68 feet to an iron pin found, said pin being a 5/8" x 18" Rebar with Cap PLS# 3118 (hereinafter referred as IPF PLS#3118) as set on a previous survey of an adjoining property, said pin being the Northeastern corner of Lousiville Gas & Electric Co (Mahoney Tract, D.B. 132, Pg. 407) and being on the western boundary line of Howard Leach et. ux (D.B. 38, Pg. 489);

Thence leaving the western boundary line of Howard Leach and with the northern boundary line of the Louisville Gas & Electric Co (Mahoney Tract, D.B. 132, Pg. 407), S67°51'10"W - 585.07 feet to a IPF PLS# 3118, said pin on the northern boundary line of the Louisville Gas & Electric Co (Mahoney Tract, D.B. 132, Pg. 407) and being the Southeast corner of Louisville Gas & Electric Co. (Boldery Tract, D.B. 139, PG. 593);

Thence leaving the line of the Louisville Gas & Electric Co (Mahoney Tract, D.B. 132, Pg. 407) and with the Louisville Gas & Electric Co. (Boldery Tract, D.B. 139, PG. 593) the following nine (9) courses:

N20°14'57"W - 91.00 feet to an IPF PLS# 3118,

S67°51'10"W - 294.99 feet to an IPF PLS# 3118,

N20°14'57"W - 267.30 feet to an IPF PLS# 3118,

N12°44'35"E - 23.01 feet to an IPF PLS# 3118,

N32°38'55"E - 19.50 feet to an IPF PLS# 3118,

N57°21'35"E - 21.33 feet to an IPF PLS# 3118,

N65°05'03"E - 63.79 feet to an IPF PLS# 3118,

N44°38'41"E - 20.75 feet to an IPF PLS# 3118, and

N28°19'06"E - 17.61 feet to an IPF PLS# 3118, said pin being 30' from the centerline of Ogden Ridge Road, said pin being the Northeast corner of Louisville Gas & Electric Co. (Boldery Tract, D.B. 139, PG. 593);

Thence leaving the Louisville Gas & Electric Co. (Boldery Tract, D.B. 139, PG. 593), N17°49'27"W - 30.62 feet to a point in the centerline of Ogden Ridge Road;

Thence with the centerline of Odgen Ridge Road the following five (5) courses:

N72°10'33"E - 11.93 feet to a point,

CURVE to the LEFT having a RADIUS of 601.68 feet, CHORD BEARING & DISTANCE of N60°53'48"E – 235.36 feet to a point,

N49°37'03"E – 135.99 feet to a point,

CURVE to the RIGHT having a RADIUS of 715.18 feet, CHORD BEARING & DISTANCE of N57°34'38"E – 198.07 feet to a point and

 $N65^{\circ}32'13"E - 150.61$ feet to the POINT OF BEGINNING and containing 9.090 acres by survey.

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This description prepared from a physical survey conducted by Douglas G. Gooch, AGE Engineering Services Inc., P.L.S. #3118, on the May 31, 2018.

BEING the same property conveyed to Louisville Gas and Electric Company by Deed dated June 14, 2018 and recorded in Deed Book 149, Page 132 in the Office of the Clerk of Trimble County, Kentucky.

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EXHIBIT D

LOUISVILLE GAS AND ELECTRIC COMPANY

Generating Facilities

Schedule of additional generating stations located in the Commonwealth of Kentucky

1. An undivided 39% interest in the Brown Solar facility of the E.W. Brown Generating Station located in Mercer County, Kentucky, the remaining 61% interest in such facility being owned by Kentucky Utilities Company.