COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY FOR AN ADJUSTMENT OF ITS ELECTRIC AND GAS RATES	))))	**CASE NO. 2018-00295**

RESPONSE OF
LOUISVILLE GAS AND ELECTRIC COMPANY
TO
COMMISSION STAFF'S FOURTH REQUEST FOR INFORMATION
DATED JANUARY 31, 2019

FILED: FEBRUARY 14, 2019

VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

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

Daniel K. Arbough

Daniel K. Arbough

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 14th day of February 2019.

Judy Schooler

Notary Public

My Commission Expires:

Judy Schooler
Notary Public, ID No. 603967
State at Large, Kentucky
Commission Expires 7/11/2022

VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Lonnie E. Bellar**, being duly sworn, deposes and says that he is Chief Operating Officer for Louisville Gas and Electric Company and Kentucky Utilities Company and an employee of LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

Lonnie E. Bellar

Lonnie E. Bellar

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 14th day of February 2019.

Judy Schooler

Notary Public

My Commission Expires:

Judy Schooler
Notary Public, ID No. 603967
State at Large, Kentucky
Commission Expires 7/11/2022

VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Robert M. Conroy**, being duly sworn, deposes and says that he is Vice President, State Regulation and Rates, for Kentucky Utilities Company and Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

Robert M. Conroy

Robert M. Conroy

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 14th day of February 2019.

Judy Schooler

Notary Public

My Commission Expires:

Judy Schooler
Notary Public, ID No. 603967
State at Large, Kentucky
Commission Expires 7/11/2022

VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Christopher M. Garrett**, being duly sworn, deposes and says that he is Controller for Kentucky Utilities Company and Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

Christopher M. Garrett

Christopher M. Garrett

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 14th day of February 2019.

Judy Schooler

Notary Public

My Commission Expires:

Judy Schooler
Notary Public, ID No. 603967
State at Large, Kentucky
Commission Expires 7/11/2022

VERIFICATION

STATE OF NORTH CAROLINA)
)
COUNTY OF BUNCOMBE)

The undersigned, **William Steven Seelye**, being duly sworn, deposes and states that he is a Principal of The Prime Group, LLC, that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

W. Seelye
William Steven Seelye

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 7th day of February 2019.

Ryan Ridenour (SEAL)
Notary Public

My Commission Expires:

7-29-23

Ryan Ridenour
NOTARY PUBLIC
BUNCOMBE COUNTY, NC
MY COMMISSION EXPIRES 7/29/23

VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **John K. Wolfe**, being duly sworn, deposes and says that he is Vice President, Electric Distribution for Kentucky Utilities Company and Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

John K. Wolfe

John K. Wolfe

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 14th day of February 2019.

Judy Schooler

Notary Public

My Commission Expires:

Judy Schooler
Notary Public, ID No. 603967
State at Large, Kentucky
Commission Expires 7/11/2022

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Fourth Request for Information
Dated January 31, 2019

Case No. 2018-00295

Question No. 1

Responding Witness: Daniel K. Arbough / Christopher M. Garrett

Q-1. State whether LG&E included any penalties or fines assessed pursuant to KRS 278.990 in the base or forecasted period. If so, provide the location of these amounts separately for electric and gas operations.

A-1. No. Penalties and fines that are pursuant to KRS 278.990 are excluded from the base and forecasted period as they are recorded to FERC account number 426.3.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Fourth Request for Information
Dated January 31, 2019

Case No. 2018-00295

Question No. 2

Responding Witness: Daniel K. Arbough / Christopher M. Garrett

Q-2. State whether LG&E included any penalties or fines assessed pursuant to KRS 278.992 in the base or forecasted period. If so, provide the location of these amounts separately for electric and gas operations.

A-2. No. Penalties and fines that are pursuant to KRS 278.992 are excluded from the base and forecasted period as they are recorded to FERC account number 426.3.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Fourth Request for Information
Dated January 31, 2019

Case No. 2018-00295

Question No. 3

Responding Witness: Daniel K. Arbough / Christopher M. Garrett

Q-3. Separately for electric and gas operations, provide LG&E's cost of complying with KRS 367.4909 for calendar years 2015 through 2017, the base period, and the forecast period. Include a breakdown of internal and external labor.

A-3. See attached.

LG&E Line Locating Expenses

	2015					2016				
	Internal		External		Total 2015	Internal		External		Total 2016
	Labor	Other	Labor	Other		Labor	Other	Labor	Other	
Operating Expense										
Gas										
887000: F887-MTCE OF MAINS	55,903	9,640	1,793,218	-	1,858,761	67,574	21,151	2,382,922	-	2,471,646
874000: F874-MAINS AND SERVICES EXPENSES	-	-	-	-	-	-	-	-	-	-
Total Gas	55,903	9,640	1,793,218	-	1,858,761	67,574	21,151	2,382,922	-	2,471,646
Electric										
501FER: F501 - TOTAL FUEL EXPENSE	-	-	-	-	-	-	-	300	-	300
510000: F510-MTCE SUPRV AND ENGR	-	-	-	-	-	-	-	-	-	-
512000: F512-MTCE OF BOILER PLANT	-	-	-	-	-	-	-	225	-	225
549000: F549-MISC OTHE PWR GEN EXPENSES	-	-	-	-	-	-	-	150	-	150
512000: F512-MTCE OF BOILER PLANT	-	-	150	-	150	-	-	-	-	-
566000: F566-MISC TRANSMISSION EXPENSES	-	-	11,716	-	11,716	-	-	23,408	-	23,408
570000: F570-MTCE OF STATION EQUIPMENT	-	-	150	-	150	-	-	-	-	-
583000: F583-OVERHEAD LINE EXPENSES*	54,785	7,181	1,041,105	-	1,103,071	67,960	6,957	1,319,156	-	1,394,074
Total Electric	54,785	7,181	1,053,121	-	1,115,087	67,960	6,957	1,343,240	-	1,418,157
Total Operating Expense	**110,688**	**16,821**	**2,846,339**	**-**	**2,973,848**	**135,534**	**28,108**	**3,726,161**	**-**	**3,889,804**
Capital Expense										
Gas										
107000: 107-CWIP	-	-	-	-	-	-	-	413,220	-	413,220
Total Gas	-	-	-	-	-	-	-	413,220	-	413,220
Electric										
107000: 107-CWIP	-	-	3,775	-	3,775	-	-	2,948	-	2,948
Total Electric	-	-	3,775	-	3,775	-	-	2,948	-	2,948
Total Capital Expense	**-**	**-**	**3,775**	**-**	**3,775**	**-**	**-**	**416,168**	**-**	**416,168**
Local Engineering										
Gas										
184000: F184-CLEARING ACCOUNTS	-	-	-	-	-	-	-	-	-	-
Total Gas	-	-	-	-	-	-	-	-	-	-
Electric										
184000: F184-CLEARING ACCOUNTS	-	-	-	-	-	-	-	-	-	-
Total Electric	-	-	-	-	-	-	-	-	-	-
Total Local Engineering	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Total Line Locating	**110,688**	**16,821**	**2,850,114**	**-**	**2,977,623**	**135,534**	**28,108**	**4,142,329**	**-**	**4,305,971**

Note: The data above represents all line locating costs, including Kentucky 811. In addition, line locating costs for capital work are not budgeted specifically in the test period.
* Underground line locating costs are included in this account.

LG&E Line Locating Expenses

	2017					Base Period				
	Internal		External		Total 2017	Internal		External		Total Base Period
	Labor	Other	Labor	Other		Labor	Other	Labor	Other	
Operating Expense										
Gas										
887000: F887-MTCE OF MAINS	64,409	9,899	2,229,098	-	2,303,407	52,841	9,294	1,219,583	-	1,281,717
874000: F874-MAINS AND SERVICES EXPENSES	-	-	-	-	-	18,316	6,880	2,849,355	-	2,874,550
Total Gas	64,409	9,899	2,229,098	-	2,303,407	71,157	16,173	4,068,938	-	4,156,268
Electric										
501FER: F501 - TOTAL FUEL EXPENSE	-	-	-	-	-	-	-	-	-	-
510000: F510-MTCE SUPRV AND ENGR	-	-	-	-	-	-	-	75	-	75
512000: F512-MTCE OF BOILER PLANT	-	-	150	-	150	-	-	-	-	-
549000: F549-MISC OTHE PWR GEN EXPENSES	-	-	-	-	-	-	-	-	-	-
512000: F512-MTCE OF BOILER PLANT	-	-	-	-	-	-	-	-	-	-
566000: F566-MISC TRANSMISSION EXPENSES	-	-	27,429	-	27,429	-	-	27,492	-	27,492
570000: F570-MTCE OF STATION EQUIPMENT	-	-	-	-	-	-	-	-	-	-
583000: F583-OVERHEAD LINE EXPENSES*	63,746	7,863	1,202,751	-	1,274,360	71,157	10,041	3,608,531	-	3,689,729
Total Electric	63,746	7,863	1,230,330	-	1,301,939	71,157	10,041	3,636,098	-	3,717,296
Total Operating Expense	**128,155**	**17,762**	**3,459,428**	**-**	**3,605,345**	**142,314**	**26,214**	**7,705,036**	**-**	**7,873,564**
Capital Expense										
Gas										
107000: 107-CWIP	-	-	674,280	-	674,280	-	-	-	-	-
Total Gas	-	-	674,280	-	674,280	-	-	-	-	-
Electric										
107000: 107-CWIP	-	-	2,700	-	2,700	-	-	7,972	-	7,972
Total Electric	-	-	2,700	-	2,700	-	-	7,972	-	7,972
Total Capital Expense	**-**	**-**	**676,980**	**-**	**676,980**	**-**	**-**	**7,972**	**-**	**7,972**
Local Engineering										
Gas										
184000: F184-CLEARING ACCOUNTS	-	2,708	115,262	-	117,970	-	4,638	764,221	-	768,860
Total Gas	-	2,708	115,262	-	117,970	-	4,638	764,221	-	768,860
Electric										
184000: F184-CLEARING ACCOUNTS	-	1,222	60,797	-	62,018	-	3,164	299,393	-	302,557
Total Electric	-	1,222	60,797	-	62,018	-	3,164	299,393	-	302,557
Total Local Engineering	**-**	**3,929**	**176,059**	**-**	**179,988**	**-**	**7,802**	**1,063,614**	**-**	**1,071,417**
Total Line Locating	**128,155**	**21,692**	**4,312,467**	**-**	**4,462,313**	**142,314**	**34,017**	**8,776,622**	**-**	**8,952,952**

Note: The data above represents all line locating costs, including Kentucky 811. In addition, line locating costs for capital work are not budgeted specifically in the test period.
* Underground line locating costs are included in this account.

LG&E Line Locating Expenses

	Test Period				
	Internal		External		Total Test
	Labor	Other	Labor	Other	Period
Operating Expense					
Gas					
887000: F887-MTCE OF MAINS	-	23,046	5,025,095	-	5,048,141
874000: F874-MAINS AND SERVICES EXPENSES	-	-	-	-	-
Total Gas	-	23,046	5,025,095	-	5,048,141
Electric					
501FER: F501 - TOTAL FUEL EXPENSE	-	-	-	-	-
510000: F510-MTCE SUPRV AND ENGR	-	-	-	-	-
512000: F512-MTCE OF BOILER PLANT	-	-	-	-	-
549000: F549-MISC OTHE PWR GEN EXPENSES	-	-	-	-	-
512000: F512-MTCE OF BOILER PLANT	-	-	-	-	-
566000: F566-MISC TRANSMISSION EXPENSES	-	-	-	-	-
570000: F570-MTCE OF STATION EQUIPMENT	-	-	-	-	-
583000: F583-OVERHEAD LINE EXPENSES*	142,980	16,917	3,268,639	-	3,428,537
Total Electric	142,980	16,917	3,268,639	-	3,428,537
Total Operating Expense	**142,980**	**39,963**	**8,293,734**	**-**	**8,476,677**
Capital Expense					
Gas					
107000: 107-CWIP	-	-	-	-	-
Total Gas	-	-	-	-	-
Electric					
107000: 107-CWIP	-	-	-	-	-
Total Electric	-	-	-	-	-
Total Capital Expense	**-**	**-**	**-**	**-**	**-**
Local Engineering					
Gas					
184000: F184-CLEARING ACCOUNTS	-	4,101	294,000	-	298,101
Total Gas	-	4,101	294,000	-	298,101
Electric					
184000: F184-CLEARING ACCOUNTS	-	2,637	189,000	-	191,637
Total Electric	-	2,637	189,000	-	191,637
Total Local Engineering	**-**	**6,738**	**483,000**	**-**	**489,738**
Total Line Locating	**142,980**	**46,701**	**8,776,734**	**-**	**8,966,415**

Note: The data above represents all line locating costs, including Kentucky 811. In addition, line locating costs for capital work are not budgeted specifically in the test period.
* Underground line locating costs are included in this account.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Fourth Request for Information
Dated January 31, 2019

Case No. 2018-00295

Question No. 4

Responding Witness: Daniel K. Arbough / Lonnie E. Bellar

Q-4. Explain LG&E's process for determining who is at fault for incidents of damage to underground utility facilities. Include in the response an organizational chart of decision makers, including job title. If applicable, provide the response separately for electric and gas operations.

A-4. First responders to a damaged underground facility will identify the damage and fill out an investigation report including date, time, location, contact information of individual or Company that damaged LG&E facilities, Before You Dig ("BUD") information, and diagrams / pictures of the damaged site. Operations personnel will review the investigation report and determine responsible party to bill based on compiled information. Repair costs will be accumulated in the Company's financial system and then sent to Underwriters Safety and Claims ("US&C"), Company's third party administrator, for billing. Payments are received by Cash Remittance, which sends a credit memo to be recorded in the Company's financial system.

The decision making process resides with the following operations personnel:

- Manager, Distribution Integrity and Compliance
- Manager, Distribution Operations
- Group Leader, Gas Regulatory Services
- Team Leader, Distribution Operations
- Damage Prevention Coordinators

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Fourth Request for Information
Dated January 31, 2019

Case No. 2018-00295

Question No. 5

Responding Witness: Lonnie E. Bellar / Daniel K. Arbough

Q-5. If LG&E determines that a third-party excavator was at fault for any damage to LG&E's underground facilities, state whether LG&E would seek to collect expenses incurred to repair damage to underground utility facilities from the third-party excavator. If so, explain LG&E's process for collecting these expenses. Include in the response whether LG&E charges the excavator for 100 percent of the associated repair costs and if not, explain why not.

A-5. Yes, LG&E would seek to collect all expenses as the result of damage incurred by a third-party excavator.

See the response to Question No. 4 for details about the process of collecting expenses.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Fourth Request for Information
Dated January 31, 2019

Case No. 2018-00295

Question No. 6

Responding Witness: Daniel K. Arbough / Christopher M. Garrett

Q-6. State whether LG&E included any expenses for participation in the Kentucky 811 One-call Center in the base or forecasted period. If so, provide the location of these amounts separately for electric and gas operations.

A-6. Yes. Expenses in the base period are shown below.

Location (FERC Acct)	**Amount**
Gas	
184	$ 13,902
863	11,913
874	33,369
887	56,890
Gas Total	$ 116,074
Electric	
184	$ 10,140
566	2,202
583*	94,021
Electric Total	$ 106,363
Total	**$ 222,437**

Expenses for Kentucky 811 are not specifically identified in the forecasted period. These expenses would be included in line locating expenses provided in response to Question No. 3.

*Underground line locating costs are included in this account.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Fourth Request for Information
Dated January 31, 2019

Case No. 2018-00295

Question No. 7

Responding Witness: Daniel K. Arbough / Christopher M. Garrett

Q-7. State whether LG&E included any expenses in the base or forecasted periods for repairing excavator damage to underground utility facilities caused by an at-fault third-party excavator. If so, separately for electric and gas operations, provide the location of these amounts, a breakdown of internal and external labor costs, and a comparison of amounts billed to and collected from at fault excavators for repairs.

A-7. Yes. See attached. The attachment displays the amounts by account included in the base period and forecasted test year for repairing damages. The Company does not track or budget third party damage and Company-caused damages separately. The customer payments column represents funds received from third parties resulting from billing and collection efforts by the Company.

LGE Electric and Gas Distribution
Third Party Damages

	Base Period					Test Period				
	Labor					Labor				
	Internal	External	Other	Customer Payments	Total Base Period	Internal	External	Other	Customer Payments	Total Test Period
Operating Expense										
Electric Distribution										
593	$ 36,327	$ 17,528	$ 12,701	$ (18,101)	$ 48,455	$ 52,777	$ 13,324	$ 12,413	$ (60,000)	$ 18,514
594	19,809	63,947	6,571	(52,432)	37,895	23,878	20,000	6,033	-	49,911
596	2,791	64,117	1,354	(3,420)	64,842	3,468	53,189	760	-	57,417
904	-	-	12,166	-	12,166	-	-	-	-	-
Total Electric Distribution	58,927	145,592	32,792	(73,953)	163,358	80,123	86,513	19,206	(60,000)	125,842
Gas Distribution										
887	133,713	14,031	26,957	(137,126)	37,575	117,990	1	37,500	(92,515)	62,976
892	-	-	-	-	-	-	-	-	-	-
904	-	-	17,305	-	17,305	-	-	26,957	-	26,957
Total LGE Gas Distribution	133,713	14,031	44,262	(137,126)	54,880	117,990	1	64,457	(92,515)	89,933
Total Operating Expense	**$ 192,640**	**$ 159,623**	**$ 77,054**	**$ (211,079)**	**$ 218,238**	**$ 198,113**	**$ 86,514**	**$ 83,663**	**$ (152,515)**	**$ 215,775**
Capital										
Electric Distribution										
107	$ 301,278	$ 1,010,156	$ 380,024	$ (1,137,517)	$ 553,941	$ 490,308	$ 1,200,664	$ 441,569	$ (1,677,588)	$ 454,953
108	99,733	154,543	57,751	(13,254)	298,773	196,450	173,244	73,690	(2,669)	440,715
Total Electric Distribution	401,011	1,164,699	437,775	(1,150,771)	852,714	686,758	1,373,908	515,259	(1,680,257)	895,668
Gas Distribution										
107	276,395	365,345	142,200	(168,658)	615,282	134,713	39,370	33,761	(48,706)	159,138
108	25,987	33,318	12,214	-	71,519	-	-	-	-	-
Total LGE Gas Distribution	302,382	398,663	154,414	(168,658)	686,801	134,713	39,370	33,761	(48,706)	159,138
Total Capital	**$ 703,393**	**$ 1,563,362**	**$ 592,189**	**$ (1,319,429)**	**$ 1,539,515**	**$ 821,471**	**$ 1,413,278**	**$ 549,020**	**$ (1,728,963)**	**$ 1,054,806**
Total Third Party Damages	**$ 896,033**	**$ 1,722,985**	**$ 669,243**	**$ (1,530,508)**	**$ 1,757,753**	**$ 1,019,584**	**$ 1,499,792**	**$ 632,683**	**$ (1,881,478)**	**$ 1,270,581**

Note: Costs for damages are not tracked or budgeted separately for third party at-fault versus company at-fault damages. The amounts above also include overhead and underground damages.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Fourth Request for Information
Dated January 31, 2019

Case No. 2018-00295

Question No. 8

Responding Witness: Daniel K. Arbough / Christopher M. Garrett

Q-8. State whether LG&E included any expenses incurred in the base or forecasted test periods to repair excavator damage to underground utility facilities in cases in which LG&E was at fault for the damage. If so, separately for electric and gas operations, provide the location of these amounts and a breakdown of internal and external labor costs.

A-8. See the response to Question No. 7.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Fourth Request for Information
Dated January 31, 2019

Case No. 2018-00295

Question No. 9

Responding Witness: Lonnie E. Bellar

Q-9. For calendar years 2014 through 2018, provide, separately for electric and gas operations, the number of locate requests for underground utility facilities and the number and percentage of the requests that were fulfilled within two business days.

A-9. Due to LG&E's established practice with Kentucky 811, LG&E does not receive locate requests for underground utility facilities separated by gas or electric. The distinction between the two requests is made by the locator of record for tracking, billing or both purposes. The data for number of requests received and the percentage of those requests fulfilled in two business days is shown below. This includes all requests measured against the two-business-day standard regardless of project requests, extreme weather, or other acceptable delay reason.

	Total Locate Requests	Fulfilled within 2 days	% Fulfilled
2014	102,875	80,056	78%
2015	121,242	91,046	75%
2016	156,413	123,157	79%
2017	161,906	120,092	74%
2018	143,221	84,843	59%[1]

[1] The backlog was eliminated as of December 21, 2018. See LG&E's Response to Question No. 11.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Fourth Request for Information
Dated January 31, 2019

Case No. 2018-00295

Question No. 10

Responding Witness: Lonnie E. Bellar

Q-10. Confirm that LG&E's failure to perform locate requests for underground gas facilities within two working days created a backlog of late locate requests. If confirmed, provide the date LG&E became aware of the backlog and when corrective actions were initiated.

A-10. LG&E can confirm that its inability to perform locate requests for underground gas facilities within two working days created a backlog of late locate requests.

LG&E became aware of the backlog in the 2nd quarter of 2013. Corrective actions were promptly initiated in 2013. During contract negotiations LG&E's expectation for actual on-time performance was established with the contractor. This included applying contractual penalties starting in April 2014. Between April 2014 and November 2017, LG&E applied penalties for late-locates in an effort to correct the contractor's performance. These penalties were accompanied by numerous meetings and conversations with the contractor regarding work performance and LG&E's expectations. Due to continued unacceptable performance, LG&E fully terminated the contract when it expired on November 30, 2017.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Fourth Request for Information
Dated January 31, 2019

Case No. 2018-00295

Question No. 11

Responding Witness: Lonnie E. Bellar

Q-11. Identify and fully describe the factor(s) (e.g., technical, financial, resource adequacy) that caused LG&E's late ticket backlog for gas facility locate requests and the steps that have been or will be taken to resolve the backlog. Include in the response a breakdown of utilization and cost of internal and external labor.

A-11. From December 1, 2013 to November 30, 2017, the main factor contributing to the late ticket backlog was contractor resource adequacy. Despite significant penalties levied against the contractor, LG&E was unsuccessful in its attempts to improve performance. LG&E's efforts to improve contactor performance was mitigated by the "consortium" approach the local utilities (LG&E, MSD, LWC, AT&T, and what is now Spectrum) took in an effort to provide one efficient locating resource.

The late ticket backlog led LG&E to terminate its arrangement with the "consortium" and retain the services of a new locate contractor. The new contract took effect on December 1, 2017. The new contractor's performance was equally unacceptable, increasing the backlog. LG&E terminated this contract effective December 31, 2018 based on LG&E's performance requirements and the new contractor's inability to meet them.

The high variability of the call volumes creates significant compliance challenges with the 48 hour standard required by the law. LG&E's commitment to compliance resulted in the identification and deployment of new strategies to meet this standard under these very difficult conditions.

In October 2018, LG&E deployed a second contractor for a short-term backlog reduction effort. In December 2018, this same contractor and another contractor entered into long-term agreements giving LG&E a larger and more variable workforce. Further, LG&E changed ticket management software and has been working on enhancing and refining reporting capabilities to increase its operational flexibility to respond to and manage the high variability of the call volumes. In addition, LG&E provided the excavating community with a specific LG&E e-mail address to facilitate helping with locate requests if necessary and implemented a specific business process to timely respond to such inquires.

Finally, additional internal resources are being dedicated to monitoring locate-request completions, reports, damage tracking and damage prevention.

The results of these efforts over the last two months have been positive. The backlog was eliminated as of December 21, 2018. The two new contractors have a total of only four at-fault damages since October 1, 2018. For January 2019, the on-time performance was approximately 97%. As the new work force grows in both number and experience, and reporting capabilities are further refined, LG&E anticipates compliance will approach almost 100%. Future late tickets should be restricted to intraday situations, project, or other unusual circumstances, which are expected to be limited in number.

LG&E spent an incremental $1,130,000 to aggressively eliminate the backlog and worked diligently to address new locate-requests by transitioning to new contract resources. External labor costs to reduce the backlog were incurred from September 29, 2018 through December 31, 2018. See attachments, which includes Excel documents, that include updates provided to the Commission.

PPL companies

John P. Malloy
Vice President-Gas Distribution

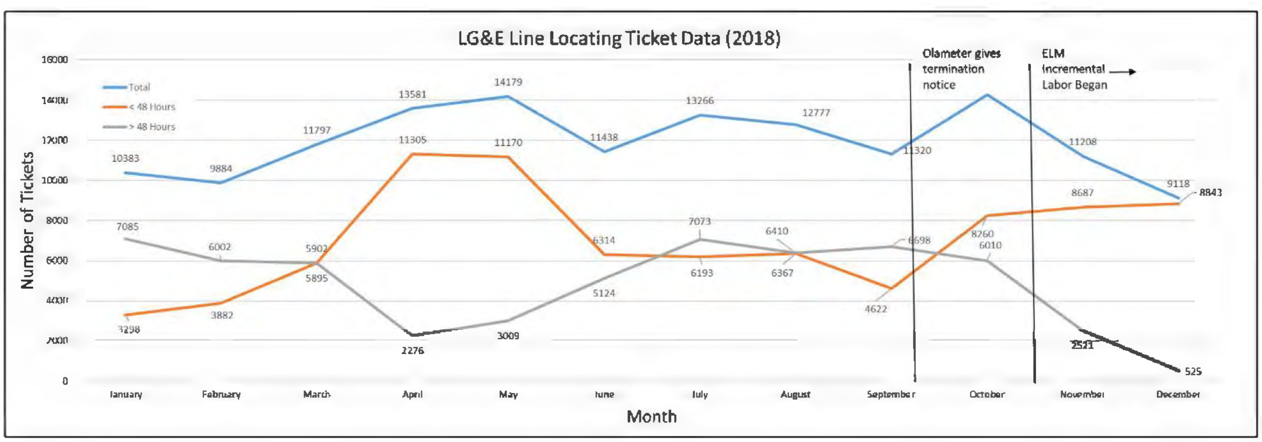
LG&E and KU Energy LLC
220 West Main Street
Louisville, KY 40202
T 502-627-4836
F 502-217-2162
John.malloy@lge-ku.com

February 13, 2019

Michael C. Nantz
Utility Inspector
Kentucky Public Service Commission
211 Sower Blvd.
Frankfort, KY 40602

Mr. Nantz,

As requested at the monthly dig-in training hosted by the KPSC on February 2, please find the attached data encompassing the remainder of 2018 as an amendment to the data transmitted to Mr. John Lyons on November 20, 2018. Consistent with our prior discussions, LG&E has continued to strive for 100% on-time locates through incremental labor beginning in October 2018. Two new line-locating contracted business partners began work in December 2018. The results of this incremental labor can be seen in the graph below as tickets located in less than 48 hours increased dramatically.



Please feel free to contact us with additional questions regarding the data provided.

Regards,

John P. Malloy

Case No. 2018-00295
Attachment 1 to Response to PSC-4 Question No. 11
Page 1 of 1
Bellar

The attachments 2-3 are being provided in a separate file in Excel format.

LG&E KU

PPL companies

November 29, 2018

John P. Malloy
Vice President-Gas Distribution

LG&E and KU Energy LLC
220 West Main Street
Louisville, KY 40202
T 502-627-4836
F 502-217-2162
john.malloy@lge-ku.com

John S. Lyons
Deputy Executive Director
Kentucky Public Service Commission
211 Sower Blvd
Frankfort, KY 40602

Mr. Lyons,

As a follow up to our prior discussions, LG&E has completed analytics on gas line locating daily ticket volumes using 2017 as a sample year. The data, which is attached, highlights scheduling and labor-forecasting complexities associated with the variability of line locating requests. This represents the single greatest challenge to performing locates in a timely manner. This is compounded by weather conditions, which further impact daily ticket volume fluctuations.

There are several observations that I would like to share based on the analysis of the raw data:

- There were 141,903 gas line-locating requests received in 2017, which equates to a daily average of 389 tickets.
- The daily ticket volume ranged from a minimum of 10 tickets (9/3/2017) to a peak of 812 tickets (1/26/2017).
- Based on a rolling two-day average, the ticket volume ranged from 11 tickets to 769 tickets.

A good example of the ticket volume variability is the 2017 Labor Day holiday is shown in the table below:

Date	Day	Ticket Volume
9/1/2017	Friday	424
9/2/2017	Saturday	23
9/3/2017	Sunday	10
9/4/2017	Monday – Labor Day	80
9/5/2017	Tuesday	797
9/6/2017	Wednesday	640
9/7/2017	Thursday	470
9/8/2017	Friday	480

While this variability provides complexity in achieving on-time locates, LG&E is striving to accommodate this variability to have 100% on-time locates and to eliminate our backlog as we continue to advance our plan consistent with my previous communications with you. Please feel free to contact me with additional questions regarding the data provided.

Please feel free to contact us with additional questions regarding the data provided.

Regards,

John P. Malloy

The attachment 5 is being provided in a separate file in Excel format.

LG&E KU
PPL companies

November 20, 2018

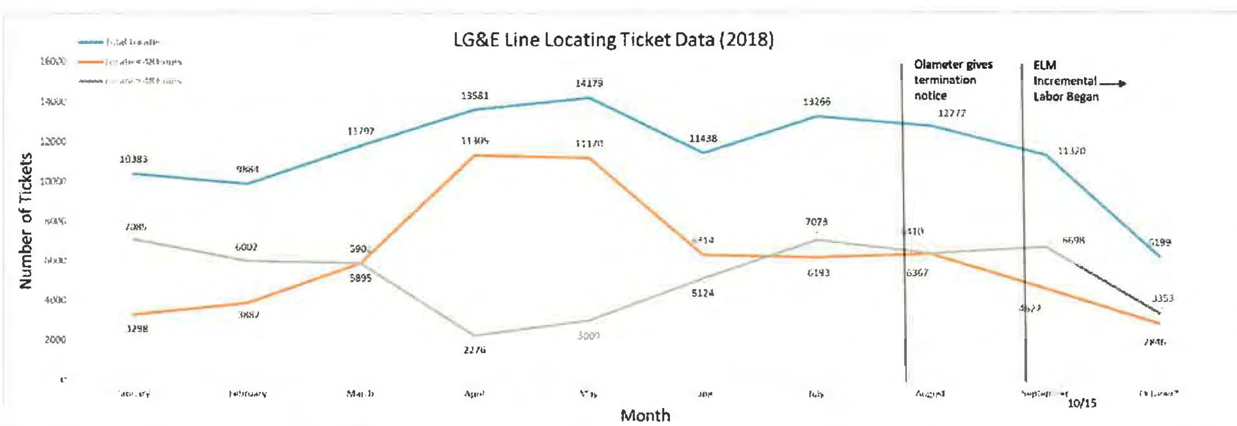
John P. Malloy
Vice President-Gas Distribution

LG&E and KU Energy LLC
220 West Main Street
Louisville, KY 40202
T 502-627-4836
F 502-217-2162
john.malloy@lge-ku.com

John S. Lyons
Deputy Executive Director
Kentucky Public Service Commission
211 Sower Blvd
Frankfort, KY 40602

Mr. Lyons,

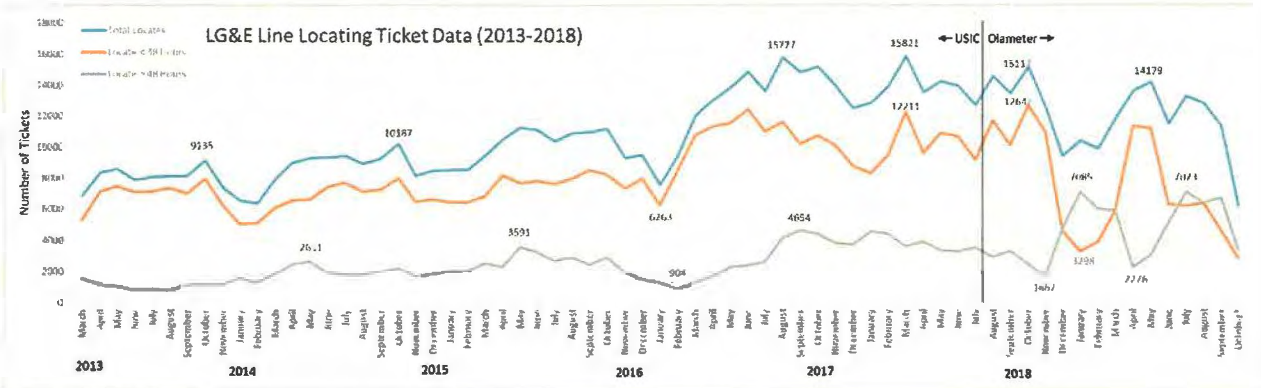
Consistent with our prior discussions, LG&E has strived with its current line-locating contractor, Olameter, and its management team to have 100% on time line locates per the requirements of the statute (KRS 367.4909). After terminating a contract with USIC in December 2017 and contracting Olameter, we observed an improved performance in on-time locates up to April 2018, as can be seen in the LG&E Line Locating Ticket Data chart below. Late ticket volumes then increased due to increased ticket volumes and issues with Olameter's staffing, training, work productivity and quality. Olameter provided a notice of termination of the contract to LG&E effective August 9, 2018. A collaborative effort between both parties resulted in a re-negotiated end date of December 31, 2018.



LG&E continues to take action to reduce our late ticket backlog through an incremental short-term line-locating contract with ELM Locating & Utility Services, which began October 1, 2018. To date, ELM has provided 17 locators and will provide 10 more by November 26th. These incremental resources are working seven days a week, 10 hours a day. We have observed an 85% reduction in our late ticket backlog since that time.

Additionally, LG&E has initiated two new long-term line-locating contracts with Utility Resource Group (URG) and ELM, which commence in December with the primary objective of providing a platform for operational flexibility to provide timely and accurate gas and electric locates. URG began its training classes on October 29, 2018 and ELM started a training class on November 5, 2018. Each contractor will have 10 trained and qualified personnel available December 10th to begin locating. This will assist in transitioning away from Olameter as our contract expires.

We continue to advance our plan consistent with our previous communication with you and continue to strive to eliminate our backlog and have 100% on time locates. You have asked for additional five-year data, which can be viewed in the attached Excel files. The data LG&E has compiled is for the time period of March 2013 through October 2018. As requested, the data consists of each locate request number, the date of the request, and the date of the completion. This data is provided to us from the vendor as part of the invoicing process. The figure below summarizes the data for your convenience.



Please note that there are several things to consider that will not be obvious in an analysis of the raw data provided as to whether or not a request is completed on time:

1. KRS 367.4909 allows for delays to the requirement to locate within two working days when extraordinary circumstances exist or if large projects are involved. Acceptable delays include:
    a. **Extraordinary Circumstances**- may include extreme weather conditions, force majeure, disasters, or civil unrest that make timely response difficult or impossible.
    b. **Large Project tickets** – Since July 2017 when the KSR 367.4909 was revised, requests in combination that equal more than 2,000 linear feet can be considered a "large project" and the time allotted is extended to five days. Whether or not a ticket is a project will not be visible in the raw data and is very difficult to capture from historical data. In most cases before July 2017, the excavator was engaged in making arrangements to have locates completed in front of them during these long projects. This would make the request late by definition but neither the facilities nor the excavator was harmed.
2. For a variety of reasons, sometimes the facilities are not easily located. If a facility is deemed **unlocateable**, a process for finding and marking it is invoked but the request will not be completed within the two working day requirement. For example, plastic pipe requires the installation of a metallic tracer wire to facilitate the locating of the pipeline. Corrosion and/or a break in the tracer wire will impede locating the underground utility thus rendering the request "unlocateable". Unlocateable requests require follow up measures typically utilizing vacuum excavation equipment.
3. As can be seen in the graph provided, there has been an upward trend in locate volumes since 2016. Two primary reasons for the increase include: (1) fiber overbuild project activity from Google and AT&T and (2) continued marketing and education of the excavating and public communities regarding the use of 811.

Additional analysis, which may be beneficial to you, is being performed. This will include daily ticket volumes with a rolling two-day average for 2017 to show the seasonal variability in ticket requests. We will forward this to you as soon as reasonably possible.

Please feel free to contact us with additional questions regarding the data provided.

Regards,

The attachments 7-13 are being provided in a separate file in Excel format.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Fourth Request for Information
Dated January 31, 2019

Case No. 2018-00295

Question No. 12

Responding Witness: Lonnie E. Bellar

Q-12. Confirm that as of December 21, 2018, LG&E had resolved its late ticket backlog for gas facility locate requests. If this cannot be confirmed, explain.

A-12. As of December 21, 2018, LG&E had resolved its late ticket backlog for gas facility locate requests. See attached update provided to the Commission regarding January 2019 locate requests.

LG&E
a PPL company

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

Rick E. Lovekamp
Manager Regulatory Strategy/Policy
T 502-627-3780
rick.lovekamp@lge-ku.com

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

February 14, 2019

RE: Louisville Gas and Electric Company Underground Facility Locating Update

Dear Ms. Pinson:

For the month of January, Louisville Gas and Electric Company ("LG&E") received a total of 10,697 locate requests with a daily range from 24 to 636.

LG&E completed a total of 10,117 locate requests in January. Due to incoming and completion date differences, the received and completed numbers will not be the same.

There were 204 tickets completed late in January 2019 for a 97.98% on time completion rate. Reasons for late completions include:

- 10% were late due to a mapping software failure on January 7.
- 28% were late due to continued misunderstanding of the "project" status. Additional training and guidance have been communicated.
- 62% were late due to lower than expected production rates associated with new field personnel. Additional resources have been added to offset the lower productivity rates.

Should you require anything further, please contact me at your convenience.

Sincerely,

Rick E. Lovekamp

Rick E. Lovekamp

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Fourth Request for Information
Dated January 31, 2019

Case No. 2018-00295

Question No. 13

Responding Witness: Lonnie E. Bellar

Q-13. State whether LG&E also has a backlog of electric facility locate requests and, if so, the steps that have been or will be taken to resolve the backlog.

A-13. LG&E does not have a backlog of electric facility locate requests.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Fourth Request for Information
Dated January 31, 2019

Case No. 2018-00295

Question No. 14

Responding Witness: Robert M. Conroy

Q-14. Refer to LG&E's Response to Staff's Third Request for Information (Staff's Third Request), Item 1 (f). Indicate where in LG&E's tariff it states that customers own and install underground electric service.

A-14. See attached. The attachment is a single page from LG&E's current tariff, P.S.C. Electric No. 11, Original Sheet No. 106.3. See, specifically, subpart 5 of the Underground Extensions section of LG&E's Line Extension Plan:

"Customer will provide, own, operate, and maintain all electric facilities on Customer's side of the point of delivery including the service and with the exception of Company's meter."

The language is consistent in the proposed tariff as well.

TERMS AND CONDITIONS

Line Extension Plan

H. UNDERGROUND EXTENSIONS

General (continued)

2) In order that Company may make timely provision for materials, and supplies, Company may require Customer to execute a contract for an underground extension under these Terms and Conditions with Company at least six (6) months prior to the anticipated date service is needed and Company may require Customer to deposit with Company at least 10% of any amounts due under the contract at the time of execution. Customer shall deposit the balance of any amounts due under the contract with Company prior to ordering materials or commencement of actual construction by Company of facilities covered by the contract.
3) Customer shall give Company at least 120 days written notice prior to the anticipated date service is needed and Company will undertake to complete installation of its facilities at least thirty (30) days prior to that date. However, nothing herein shall be interpreted to require Company to extend service to portions of subdivisions not under active development.
4) At Company's discretion, Customer may perform a work contribution, to Company's specifications, including but not limited to conduit, setting pads, or any required trenching and backfilling, and Company shall credit amounts due from Customer for underground service by Company's estimated cost for such work contribution.
5) Customer will provide, own, operate and maintain all electric facilities on Customer's side of the point of delivery including the service and with the exception of Company's meter.
6) The normal point of delivery shall be at a junction device at the corner of the lot nearest Company's facilities. Customer shall bring Customer's service line to a point within 1 1/2 feet of the junction device with a sufficient length of service conductor left coiled above grade for completion of installation and connection by Company.
7) In consideration of Customer's underground service, Company shall credit any amounts due under the contract for each service at the rate of $50.00 or Company's average estimated installed cost for an overhead service whichever is greater.
8) Unit charges, where specified herein, are determined from Company's estimate of Company's average unit cost of such construction and the estimated cost differential between underground and overhead distribution systems in representative residential subdivisions.
9) Three phase primary required to supply either individual loads or the local distribution system may be overhead unless Customer chooses underground construction and deposits with Company a non-refundable deposit for the cost differential.

Individual Premises

1) Within the City of Louisville underground district or in those cases where Company's engineering or operating convenience requires the construction of an underground extension to an individual premise, the excess of the cost of an underground extension over that of an overhead extension will be at no cost.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Fourth Request for Information
Dated January 31, 2019

Case No. 2018-00295

Question No. 15

Responding Witness: Robert M. Conroy

Q-15. Refer to LG&E's Response to Staff's Second Request for Information, Item 1(n), which states that refunds will be provided during any year during which another customer connects to the extension. Also refer to LG&E's Response to Staff's Third Request, Item 1(e), which states that annual refunds are time consuming and labor intensive and that LG&E will review any contracts that are approaching the ten-year refund expiration date and issue refunds at that time.

a. Explain the discrepancy between these two responses.

b. Provide the definition or criteria used to determine if an activity is "time consuming and labor intensive."

c. Provide support for the statement that annual refunds are time consuming and labor intensive.

A-15.

a. In LG&E's response to PSC 2-1(n), the Company was stating that refunds would be based on the year when another customer connects to the requested extension and evaluated at the 10 year expiration. In LG&E's response to PSC 3-1(e), the Company was clarifying that contracts would be reviewed after 10 years with refunds provided to the line extension customer based on the year other customers connected to that extension.

b. To conduct analysis for all active 0 – 10 year contracts, Company personnel would need to track every customer extension in excess of 1,000 feet within the Geographic Information System ("GIS"), manually review the GIS for any new connections to a line extension greater than 1,000 feet for a specific year, field verify all new connections to the extension are correct, determine the refund amount based on year, track the remaining balance not to exceed the deposit, and then issue refund checks to the customer through the Company financial systems.

c. See the response to part b.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Fourth Request for Information
Dated January 31, 2019

Case No. 2018-00295

Question No. 16

Responding Witness: Robert M. Conroy / John K. Wolfe

Q-16. Refer to LG&E's Response to Staff's Third Request, Item 24. Confirm that costs incurred prior to the effective date of any Commission approval would not be passed through to LG&E's Attachment customers.

A-16. Confirmed. LG&E will not pass through costs incurred prior to the effective date of Commission approval to LG&E's Attachment Customers.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Fourth Request for Information
Dated January 31, 2019

Case No. 2018-00295

Question No. 17

Responding Witness: Robert M. Conroy / Counsel

Q-17. Refer to the Direct Testimony of Lonnie E. Bellar (Bellar Testimony), page 53, regarding the planned construction or purchase of two facilities, one at the Louisville South Service Center and one in Elizabethtown. State whether LG&E is aware that in Case No. 2016-00181 the Commission issued a declaratory order which observed that the Commission has historically held that the construction of headquarters and regional office buildings is not in the ordinary course of business and does require a Certificate of Public Convenience and Necessity (CPCN), and required Columbia Gas of Kentucky, Inc. to apply for a CPCN to obtain Commission approval of the construction of a proposed training facility. If so, explain why LG&E did not request a declaratory order or file a CPCN application for the proposed construction. If not, state whether LG&E is preparing either a similar request or an application.

A-17. The Companies are aware of the Commission's Order of September 9, 2016 in Case No. 2016-00181. They reviewed that order as part of an extensive review of Commission decisions prior to determining that KRS 278.020(1) did not require a CPCN for the two buildings in question.

In several instances, the Commission has expressly found that the construction of an office building does not require a certificate. For example, in Case No. 2003-00403,[2] Kenergy applied to the commission for certificates to construct two new office building to replace existing office buildings. The Commission found one of these buildings should be "considered 'an extension in the ordinary course of business' because it will not increase rates, is relatively low cost, and will not result in wasteful duplication of facilities." The Commission made similar findings regarding the other facility, but granted the utility's request for a CPCN because the utility had "requested a CPCN to construct." Similarly, in Case No. 2007-00424,[3] the Commission found that a water utility's construction of an

[2] *Application of Kenergy Corporation For A Certificate of Convenience And Necessity To Construct New Branch Offices In Hartford and Hanson*, Case No. 2003-00403 (Ky. PSC Apr. 15, 2004).

[3] *Application of Madison County Utility, District For An Order Issuing A Certificate of Public Convenience and Necessity and For Authority To Borrow Funds and To Refinance Certain Indebtedness of the District*, Case No. 2007-00424 (Ky. PSC Mar. 20, 2008).

office building did not require a CPCN even though the building's cost was the equivalent of five percent of the utility's net utility plant. Similarly, Commission Staff has issued several opinions in which it has found that the construction of a building is in the ordinary course.[4]

KRS 278.020(1) expressly provides that extensions in the ordinary course do not require a CPCN. By promulgating 807 KAR 5:001, Section 15(3), the Commission established the definition of an extension in the ordinary course. Section 15(3) provides:

> A certificate of public convenience and necessity shall not be required for extensions that do not create wasteful duplication of plant, equipment, property, or facilities, or conflict with the existing certificates or service of other utilities operating in the same area and under the jurisdiction of the commission that are in the general or contiguous area in which the utility renders service, and that do not involve sufficient capital outlay to materially affect the existing financial condition of the utility involved, or will not result in increased charges to its customers.

Section 15(3) does not categorically exclude any type of facility from the definition of extension in the ordinary course. Instead, the criteria set forth in the regulation are applied to the proposed facility to determine if it is in the ordinary course.

In Case No. 2016-00181, the September 9, 2016 Order did not apply a categorical exclusion to the hold that an application for a CPCN was required. It applied the criteria set forth in Section 15(3) to the proposed facility and determined that the applicant failed to demonstrate that the proposed facility would not result in wasteful duplication of facilities based upon the facts specific to that utility's operations.

The Companies performed the same analysis to the two facilities at issue and determined that each was an extension in the ordinary course. First, while Hardin County Water District No. 2's building is not in KU's service territory, the building is very close to KU's service territory, and based on industry custom and

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4 *See, e.g.*, PSC Staff Opinion 2018-012 (Oct. 10, 2018) (construction of garage); PSC Staff Opinion 2017-005 (Feb. 7, 2017) (construction of woodshop and storage area); PSC Staff Opinion 2016-019 (Oct. 31, 2016) (construction of a garage/storage facility); PSC Staff Opinion 2011-002 (Feb. 17, 2011) (construction of major addition to office building); PSC Staff Opinion 2010-020 (Sept. 2, 2010) (construction of office building). *But see* PSC Staff Opinion 2014-002 (Mar. 12, 2014) (office building representing approximately eight percent of water utility's net utility plant is not in ordinary course and requires CPCN); PSC Staff Opinion 2012-002 (construction of office building and warehouse representing approximately 1.7 percent of water utility's net utility plant is not in ordinary course and requires CPCN).

practice, KU does not anticipate Bluegrass Energy Cooperative objecting to KU's self-service of the facility. Second, the construction of neither facility involves sufficient capital outlay to materially affect either Company's existing financial condition. The estimated cost of the proposed Louisville South Service Center is $10.5 million or approximately 0.246 percent of LG&E's net electric utility plant as of August 31, 2018.[5] The estimated cost of the Elizabethtown facility is $5 million or approximately 0.1 percent of KU's net electric utility plant as of August 31, 2018.[6] These facilities represent a much smaller percentage of net utility plant than the facility proposed in Case No. 2016-00181 and the facilities reviewed in the decisions cited in support of the statement regarding the Commission's historical treatment of utility office buildings. They also represent a much smaller percentage of net utility plant than the threshold level of one percent the Commission has declared to involve sufficient capital outlay to materially affect the existing financial condition of the utility involved.[7]

Moreover, unlike Case No. 2016-00181, the issue of wasteful duplication is not present in either the case of the South Service Center or the new facility in Elizabethtown. The South Service Center is planned to co-locate on the property with an existing building and result in synergies by combining different functions into one. The Elizabethtown facility would result in combining two separate offices into one.

Note also that in the case of Elizabethtown facility, the Companies are also considering the purchase of an existing building rather than the construction of a new facility. The Commission has previously found that KRS 278.020(1) does not require a CPCN for the purchase of existing real estate.[8]

For these reasons, the Companies' review clearly indicated that KRS 278.020(1) does not require a CPCN be obtained for either of the proposed facilities. The Companies did not intend to file an application for CPCN nor do they believe an application for a declaratory order is required or necessary.

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5 $10,500,000 ÷ $4,263,883,146 = 0.002462.

6 $6,000,000 ÷ $5,794,226,078 = 0.001035.

7 *See, e.g., Application of Northern Kentucky Water District for Approval of Dixie Highway Water Main Improvements, Issuance of a Certificate of Convenience and Necessity and Approval of Financing,* Case No. 2014-00171 (Ky. PSC Aug. 6, 2014) ("The proposed project represents an increase in . . . total utility plant of less than 1 percent. The Commission traditionally considers such an increase in total utility plant as ordinary, as it does not materially affect the utility's existing financial condition and will not require an immediate adjustment of its rates.").

8 *See, e.g., Carroll County Water District No. 1's Application For A Certificate of Public Convenience and Necessity For the Construction of Facilities For The District and Approval of A Lease Agreement In the Principal Amount of $1,250,000 To Finance Such Facilities and To Refund Certain Prior Indebtedness,* Case No. 95-062 (Ky. PSC Feb. 22, 1995).

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's Fourth Request for Information
Dated January 31, 2019**

Case No. 2018-00295

Question No. 18

Responding Witness: Lonnie E. Bellar

Q-18. Refer to the Bellar Testimony, page 58, regarding the Pipeline and Hazardous Materials Safety Administration's (PHMSA) pending Plastic Pipeline Rule.

a. Provide a discussion of the November 20, 2018 Final Rule, the requirements with which LG&E will have to comply, and the timeframe for compliance.

b. The PHMSA November 19, 2018 press release regarding the Final Rule states, "As a result of the Final Rule's updated design factor, the cost of materials to produce new pipe is estimated to be reduced by 10 percent ... " Provide an estimate of the impact this estimated material production cost will have on LG&E's budgeted repair, replacement, and installation of plastic pipe.

c. Explain whether the Final Rule as issued has any impact on LG&E's pipeline budget for the test year.

A-18.

a. See a discussion of the *Final Order for the Plastic Pipe Rule* grouped by category below. The original rule had an enforcement date of January 22, 2019. The enforcement date has been suspended by PHMSA to allow PHMSA to review a December 2018 AGA petition to PHMSA requesting a few revisions to the final regulations and additional time to implement the changes. Due to the government shutdown PHMSA was not able to complete this review prior to the original enforcement date of January 22, 2019. The Company will be required to comply with the Final Order along with any revisions from the AGA petition except for those made to gathering lines because the Company does not have gathering lines as defined in 49 CFR 192.

General

PHMSA made changes to the General section of part 192 to update the definitions, document incorporation and gathering lines section of this area. The definition section was updated to include a definition for a "weak link" (a device or method used when pulling polyethylene pipe, typically through methods such as horizontal direction, to ensure damage will not occur to the pipeline by exceeding the maximum tensile stresses allowed). The document incorporation section was revised based on changes made in the Plastic Pipe Rule. Changes made to the Gathering Lines section are not applicable to the Company since it does not have Gathering Lines by definition.

Materials

Changes to materials included updating requirements for plastic pipe material so that it is manufactured to a listed specification and, resistant to chemicals with which contact may be anticipated and is free from defects. Additionally, the requirement section for using used plastic pipe was revised to include a requirement that the used plastic pipe could only have been used in gas service. Changes to material marking requirements include a requirement that plastic components (including valves, fittings and pipe) must be marked as prescribed in the specification or standard it was manufactured after December 31, 2019. Additionally, markings on plastic pipe must be marked in the listed specification at intervals not exceeding 2-feet and all physical markings on the plastic pipelines in the listed specification must be legible until the time of installation. A section was added stating that operator's must have and follow written procedures for the storage and handling of plastic pie and associated components that meet the applicable listed specifications.

Pipe Design

Changes were made to the design factor in the design formula for plastic pipe. Prior to the revision in the Plastic Pipe rule the design factor was 0.32. This has been revised so an operator may use a design factor of 0.40 if the polyethylene pipe is manufactured after January 22, 2019, the design pressure is less than 125 psig, the material designation code is PE2708 or PE4710, the pipe has a nominal size of 12-inches or less and has a minimum wall thickness according to a table in the Pipe Design section. The Plastic Pipe Rule also had revisions for the requirements for plastic materials PA-11 and PA-12, however, the Company currently does not use these materials in its natural gas system.

Design of Pipeline Components

Revisions in this section include a revision to general requirements that plastic pipeline components installed after January 22, 2019 must be able to withstand operating pressures and other anticipated loads in accordance to a general specification. Revisions were made to the section on pipeline valves that plastic valves must be designed to meet listed specifications and not operated in conditions exceeding applicable pressure and temperature ratings from the applicable listed specification. A similar revision was made for plastic fittings that a plastic fitting may only be installed if it meets a listed specification. A new section was added providing requirements for risers as well.

Joining Materials other than by Welding

Revisions were made requiring that newly installed mechanical fittings must meet a listed specification and provide a Category 1 seal and resistance. References to ASTM D2513 were removed from requirements for qualifying plastic pipe joining procedures and instead requires operators test procedures in accordance with listed specification. PHMSA also referenced ASTM F2620-12 (Standard Practice of Heat Fusion Joining of Polyethylene Pipe and Fittings) applicable to PE pipe and fittings except for electrofusion.

General Construction Requirements for Transmission Lines and Mains

Changes were made to specifically address plastic pipe in the requirements for bends and elbows. Revisions were made for the installation of plastic pipe requiring that minimum wall thicknesses must be in accordance with plastic pipe design requirements, plastic pipe installed in casing must be protected at the entrance and exit points and the end being inserted must be closed and requirements for terminating plastic pipe aboveground. Revisions were made for installing plastic pipelines by trenchless technology with requirements for using weak links as defined in the definitions section of 49 CFR 192 and take practicable steps to avoid striking other underground structures at the time of installation.

Customer Meters, Service Regulators and Service Lines

Revisions were made to general requirements for connections to main piping so that compression type fittings used for the service line to main connection are Category 1 type fittings. Revisions were also made for service lines installed by trenchless technology analogous to those described for installation of Transmission Lines and Mains.

Requirements for Corrosion Control

A new requirement was added to the section for external corrosion control requirements for buried or submerged pipelines installed after July 31, 1971 requiring cathodic protection on electrically isolated metal fittings on plastic pipelines not meeting exceptions provided after the effective date of the rule and that such fittings must be maintained in accordance with the operator's integrity management plan.

Test Requirements

A revision was made to reduce the maximum limit for testing pressure from 3x to 2.5x the pressure determined in the plastic pipe design section.

Maintenance

A section was added prohibiting the use of a temporary mechanical leak clamp installed after January 22, 2019 as a permanent repair of plastic pipe in distribution service and establishes minimum requirements for equipment maintenance for equipment used in heat fusion of plastic pipe.

b. The statement in the November 19, 2018 PHMSA press release that, “As a result of the Final Rule’s updated design factor, the cost of materials to produce new pipe is estimated to be reduced by 10 percent, resulting in an annual material cost savings of approximately $32 million for transmission, gathering, and distribution operators.” is in reference to the change made in the design factor of plastic pipe being changed from 0.32 to 0.40, which mathematically allows for thinner walled pipe to be used to operate at the same pressure or for pipe of the same wall thickness to operate at a higher pressure. However, actual cost reductions for operators material costs due to the change made in the design factor will be dependent on plastic pipe manufacturers’ and distributors’ changes based on the design factor change and associated cost changes. Additionally, the design factor change is for pipe manufactured after January 22, 2019 (likely to be a later date as PHMSA has suspended enforcement) and it will take some time for pipeline suppliers to work through existing inventory. The Company has not determined if it will make changes in its current operating practice in regards to using polyethylene pipe at higher pressures than currently used on the system (maximum of 60 psig).

Based on the factors above the impact to the Company’s cost for plastic pipe is not known at this time. However, 10% of plastic pipe expenditures over the previous 2 years has averaged between $55k and $60k, with the majority of expenditures made for capital replacement and installation.

c. As issued changes made in the *Final Order for the Plastic Pipe Rule* are not anticipated to have significant impact to the costs in the test year.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Fourth Request for Information
Dated January 31, 2019

Case No. 2018-00295

Question No. 19

Responding Witness: Daniel K. Arbough / William Steven Seelye

Q-19. Refer to the Direct Testimony of William Steven Seelye (Seelye Testimony), pages 62-63.

a. Explain why LG&E proposes the five-year Treasury rate plus 100 basis points as the interest rate for the Standard Facility Contribution (SFC) factor instead of LG&E's cost of capital.

b. Provide the calculation of the SFC factor as proposed, and compare it with LG&E's proposed cost of capital.

A-19.

a. The Standard Facility Contribution rider is designed to provide large commercial and industrial gas customers an alternative to making up-front contributions-in-aid-of-construction ("CIAC") payments for gas main extensions.

Under the Standard Facility Contribution rider, LG&E would allow customers otherwise required to make up-front CIAC payments for gas main extensions to make monthly payments over five years for qualifying gas main extensions under the proposed rider. The Standard Facility Contribution Rider is thus intended to be an economic development tool designed to facilitate large commercial and industrial customers to connect to, and take service from, LG&E's gas distribution system. Load additions such as these allow LG&E to spread its fixed costs over increased gas throughput by increasing LG&E's gas revenues. Indexing the SFC factor to the 5-year Treasury rate is designed to reflect the marginal borrowing cost that the Company would incur to issue a 5-year bond. Therefore, the 5-year Treasury rate plus 1% is a proxy for the actual cost that would be incurred by the Company in order to allow a qualifying customer to pay for a main extension over 5 years. The mechanism embodied in the rider helps ensure that LG&E is made whole with respect to any borrowing costs, that the customer seeking the gas main extension pays for that cost, and that other gas customers benefit by spreading fixed costs over higher system throughput.

It is less likely that calculating the SFC factor using LG&E's higher weighted cost of capital would have the same impact in encouraging customers to connect to LG&E's gas distribution system, thus diminishing the effectiveness of the rider as a tool for encouraging economic development and the associated benefits.

b. As of January 31, 2019, the 5-year Treasury constant maturity rate published in the Federal Reserve Statistical Release H-15 was 2.43%. Adjusting this interest rate by 100 basis points would result in an effective interest rate to an eligible customer of 3.43% (or i = 0.0343 ÷ 12 months = 0.002858). Therefore, the Standard Facility Contribution Factor would be:

$$\boldsymbol{Standard\ Facility\ Contribution\ Factor} = \frac{\boldsymbol{i(1+i)^{60}}}{\boldsymbol{(1+i)^{60}-1}}$$

$$= \frac{\mathbf{0.002858(1+0.002858)^{60}}}{\mathbf{(1+0.002858)^{60}-1}}$$

$$= 0.0181604$$

LG&E's proposed cost of capital as originally filed is 7.62% (i = 0.0775 ÷ 12 months = 0.006350). Using the LG&E proposed cost of capital, the monthly factor would be:

$$\boldsymbol{Standard\ Facility\ Contribution\ Factor} = \frac{\boldsymbol{i(1+i)^{60}}}{\boldsymbol{(1+i)^{60}-1}}$$

$$= \frac{\mathbf{0.006350(1+0.006350)^{60}}}{\mathbf{(1+0.006350)^{60}-1}}$$

$$= 0.0200950$$

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's Fourth Request for Information
Dated January 31, 2019

Case No. 2018-00295

Question No. 20

Responding Witness: Robert M. Conroy

Q-20. Refer to the proposed change in LG&E's Gas Main Extension Rules on Sheet 106 of its tariff. Explain how the proposed addition of paragraph 2 to the rules will be applied to residential customers, and what LG&E will accept as a guarantee of a potential residential customer's estimated annual net revenue.

A-20. The Company's intention is to apply the net revenue methodology only to non-residential gas customers. Residential gas customers are entitled to receive the first 100 feet of any gas main extension at no additional cost. Additional language has been added on Sheet No. 106 of LG&E's Gas Tariff to clarify that the net revenue methodology is only applied to non-residential customer gas main extensions. Since the net revenue methodology is applicable only to non-residential gas customers, it will not be necessary to secure a guarantee from residential customers.

Attached is a proposed modified Tariff Sheet No. 106 to clarify the issue.

LG&E is also proposing to make similar changes to its electric line extension tariffs to clarify that the net revenue methodology is applicable only to non-residential electric customers. See the attached modified proposed LG&E Electric Tariff Sheet Nos. 106.1 and 106.2.

Terms and Conditions
Gas Main Extension Rules

1. Company will extend its gas distribution mains at its own expense for a distance of one hundred (100) feet to each bona-fide applicant who agrees in writing to take service within one (1) year after the extension is completed and who has a suitable Customer's Service Line installed and ready for connection provided the following criteria are met:
   a. The existing main is of sufficient capacity to properly supply the additional customer(s);
   b. The customer(s) contracts to use gas on a continuous basis for one (1) year or more; and,
   c. The potential consumption and revenue will be of such amount and permanence as to warrant the capital expenditures involved to make the investment economically feasible.
2. Company shall provide to Non-Residential Customer requesting permanent service a line extension in excess of one hundred (100) feet per Customer to the extent that the cost of such line extension does not exceed five (5) times the Customer's estimated annual net revenue, where "net revenue" is defined as the customer's total revenue (excluding franchise fees and school taxes) less gas supply costs (i.e., the Gas Supply Cost Component of the Company's rates). In such cases, Company shall require the Customer to provide a guarantee of the estimated annual net revenue not less than five years, after taking into consideration any ramping up of the customer's demand and energy. N N N N N N N N
3. Company will extend its gas mains in excess of the above distance provided the applicant for service advances to Company an amount equal to the estimated cost of such excess portion of the extension. Company shall have the right to determine the length of the extension and to specify the pipe size and location of the extension, as well as the timing of its construction. T
4. Where funds were advanced in accordance with paragraph 3 for extensions into developed residential neighborhoods and notwithstanding paragraph 1, any customer that subsequently connects to the main during a ten-year period from the effective date of the main extension contract shall advance to Company a pro rata share of the cost of the extension over 100 feet per connected customer. T
5. For each new year-round customer connected to an extension in accordance with paragraph 4, Company will refund to the previous applicant(s) who advanced funds an amount equal to the difference between the refundable amount advanced and the amount of the advance so determined for the new applicant. T
6. Company will extend its gas mains to serve a proposed real estate subdivision provided the applicant for such extension advances to Company an amount equal to the estimated cost of the total extension. Company shall have the right to determine the length of the extension and to specify the pipe size and the location of the extension, as well as the timing of its construction. T
7. For each new year-round customer actually connected to the extension within a ten-year period following the effective date of the gas main extension contract, but not to extensions or laterals therefrom, Company will refund to applicant(s) who advanced funds in accordance with paragraph 6 above an amount equal to 100 times the average unit cost per foot of extension advanced by such applicant(s); provided that such refunds shall not exceed, in the aggregate, the amount originally advanced to Company. T T

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DATE EFFECTIVE: Effective with Service Rendered
On And After November 1, 2018

ISSUED BY: /s/ Robert M. Conroy, Vice President
State Regulation and Rates
Louisville, Kentucky

Issued by Authority of an Order of the Public Service Commission in Case No. 2018-00295 dated ____

Louisville Gas and Electric Company

Terms and Conditions
Line Extension Plan

3. **GENERAL** (continued)
   e. Customer must agree in writing to take service when the extension is completed and have T
   Customer's building or other permanent facility wired and ready for connection. T
   f. Nothing herein shall be construed as preventing Company from making electric line extensions
   under more favorable terms than herein prescribed provided the potential revenue is of such T
   amount and permanency as to warrant such terms and render economically
   feasible the capital expenditure involved and provided such extensions are made to other
   Customers under similar conditions.
   g. Company may require a non-refundable deposit in cases where Customer does not have a T
   real need or in cases where the estimated revenue does not justify the investment.
   h. The Company shall not be obligated to extend its lines in cases where such extensions, in the T
   good judgment of Company, would be infeasible, impractical, or contrary to good engineering
   or operating practice, unless otherwise ordered by Commission.

4. **NORMAL LINE EXTENSIONS**
   a. In accordance with 807 KAR 5:041, Section 11(1), Company will provide, at no cost, a line T
   extension of up to 1,000 feet to Customer requesting permanent service where the installed T
   transformer capacity does not exceed 25kVA.
   b. Where <u>Non-Residential</u> Customer requires poly-phase distribution service or transformer T
   capacity in excess of 25 kVA and Company provides such facilities, Company shall provide T
   at its own expense the requested line extension, but only to the extent that the cost of the N
   requested extension does not exceed the lesser of (i) the cost of a comparable overhead N
   extension (if an underground extension is requested) or (ii) five (5) times Customer's N
   estimated annual net revenue, where "net revenue" is defined as Customer's total revenue N
   less base fuel, Fuel Adjustment Clause, Off-System Sales, Demand Side Management, N
   franchise fees, and school taxes. Company may require <u>Non-Residential</u> Customer to pay N
   in advance a non-refundable amount for the additional cost above the five (5) times net N
   revenue calculation to Company in providing facilities above that required in NORMAL LINE N
   EXTENSIONS ¶ a. above. Customer must commit to a minimum contract term of five (5) N
   years. N

5. **OTHER LINE EXTENSIONS** T
   a. In accordance with 807 KAR 5:041, Section 11(2), Company shall provide to Customer T
   requesting permanent service a line extension in excess of 1,000 feet per Customer but
   Company may require the total cost of the footage in excess of 1,000 feet per Customer, based
   on the average cost per foot of the total extension, be deposited with Company by Customer.
   b. After the ten (10) year period following the line extension, Company shall refund to Customer, T
   who made the deposit for excess footage, the cost of 1,000 feet of extension for each additional
   customer connected during the first ten (10) year period directly to the original extension for T
   which the deposit was made.
   c. After the ten (10) year period following the line extension, Company shall refund to Customer, T
   who made the deposit for excess footage, the cost of 1,000 feet of extension less the length of
   the lateral or extension for each additional Customer connected during the first ten (10) year T
   period by a lateral or extension to the original extension for which the deposit was made. T
   d. The total amount refunded shall not exceed the amount originally deposited nor shall any T
   refund be made after the ten (10) year refund period ends.

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ISSUED BY: /s/ Robert M. Conroy, Vice President
State Regulation and Rates
Louisville, Kentucky

Issued by Authority of an Order of the
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2018-00295 dated ____

Terms and Conditions
Line Extension Plan

5. OTHER LINE EXTENSIONS (continued)

e. Where Non-Residential Customer requires poly-phase distribution service or transformer capacity in excess of 25 kVA and Company provides such facilities, Company shall provide at its own expense the requested line extension, but only to the extent that the cost of the requested extension does not exceed the lesser of (i) the cost of a comparable overhead extension (if an underground extension is requested) or (ii) five (5) times Customer's estimated annual net revenue, where "net revenue" is defined as Customer's total revenue less base fuel, Fuel Adjustment Clause, Demand Side Management, franchise fees, and school taxes. Company may require Non-Residential Customer to pay in advance a non-refundable amount for the additional cost above the five (5) times net revenue calculation to Company in providing facilities above that required in NORMAL LINE EXTENSIONS ¶ a. above.

6. OVERHEAD LINE EXTENSIONS FOR SUBDIVISIONS

a. In accordance with 807 KAR 5:041, Section 11(3), Customer desiring service extended for and through a subdivision may be required by Company to deposit the total cost of the extension.
b. After the ten (10) year period following the line extension, Company shall refund to Customer, the cost of 1,000 feet of extension for each additional Customer connected during the first ten (10) year period directly to the original extension for which the deposit was made.
c. The total amount refunded shall not exceed the amount originally deposited nor shall any refund be made after the ten-year refund period ends.

7. MOBILE HOME LINE EXTENSIONS

a. Company will make line extensions for service to mobile homes in accordance with 807 KAR 5:041, Section 12, and Commission's Orders.
b. Company shall provide, at no cost, a line extension of up to 300 feet to Customer requesting permanent service for a mobile home.
c. Company shall provide to Customer requesting permanent service for a mobile home a line extension in excess of 300 feet and up to 1,000 feet but Company may require the total cost of the footage in excess of 300 feet, based on the average cost per foot of the total extension, be deposited with Company by Customer. Beyond 1,000 feet the policies set forth in OTHER LINE EXTENSIONS shall apply.
d. Each year for four (4) years Company shall refund to Customer equal amounts of the deposit for the extension from 300 feet to 1,000 feet.
e. If service is disconnected for sixty (60) days, if the original mobile home is removed and not replaced by another mobile home or a permanent structure in sixty (60) days, the remainder of the deposit is forfeited.
f. No refund will be made except to the original Customer.

8. UNDERGROUND LINE EXTENSIONS

a. General

i. Company will make underground line extensions for service to new residential customers and subdivisions in accordance with 807 KAR 5:041, Section 21.

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