

**COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

APPLICATION OF LOUISVILLE GAS)	
AND ELECTRIC COMPANY FOR AN)	
ADJUSTMENT OF ITS ELECTRIC RATES)	CASE NO. 2016-00371
AND FOR CERTIFICATES OF PUBLIC)	
CONVENIENCE AND NECESSITY)	

**INITIAL DATA REQUESTS OF SIERRA CLUB AND AMY WATERS
TO LOUISVILLE GAS AND ELECTRIC COMPANY**

Pursuant to the Kentucky Public Service Commission’s (“Commission”) December 13, 2016 Order (“Scheduling Order”), Sierra Club and Amy Waters (“Proposed Intervenors”) hereby propound the following requests for information on Louisville Gas and Electric Company in the above-captioned proceeding.

The Company shall answer these requests for information in the manner set forth in the Scheduling Order and by no later than the January 25, 2017 deadline set forth in the Appendix to that order. Please produce the requested documents in electronic format to:

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Wherever the response to an interrogatory or request consists of a statement that the requested information is already available to the Proposed Intervenors, provide a detailed citation to the document that contains the information. This citation shall include the title of the document, relevant page number(s), and to the extent possible paragraph number(s) and/or chart(s)/table(s)/figure number(s).

In the event that any document referred to in response to any request for information has been destroyed, specify the date and the manner of such destruction, the reason for such destruction, the person authorizing the destruction and the custodian of the document at the time of its destruction.

We reserve the right to serve supplemental, revised, or additional discovery requests as permitted in this proceeding.

DEFINITIONS

Unless otherwise specified in each individual interrogatory or request, “you,” “your,” the “Company,” or “LG&E,” refers to Louisville Gas and Electric Company, and its affiliates, employees, and authorized agents.

“And” and “or” shall be construed either conjunctively or disjunctively as required by the context to bring within the scope of these interrogatories and requests for production of documents any information which might be deemed outside their scope by another construction.

“Any” means all or each and every example of the requested information.

“Communication” means any transmission or exchange of information between two or more persons, whether orally or in writing, and includes, without limitation, any conversation or discussion by means of letter, telephone, note, memorandum, telegraph, telex, telecopy, cable, email, or any other electronic or other medium.

“Document” refers to written matter of any kind, regardless of its form, and to information recorded on any storage medium, whether in electrical, optical or electromagnetic form, and capable of reduction to writing by the use of computer hardware and software, and includes all copies, drafts, proofs, both originals and copies either (1) in the possession, custody or control of the Company regardless of where located, or (2) produced or generated by, known to or seen by the Company, but now in their possession, custody or control, regardless of where located whether or still in existence.

Such “documents” shall include, but are not limited to, applications, permits, monitoring reports, computer printouts, contracts, leases, agreements, papers, photographs, tape recordings, transcripts, letters or other forms of correspondence, folders or similar containers, programs, telex, TWX and other teletype communications, memoranda, reports, studies, summaries, minutes, minute books, circulars, notes (whether typewritten, handwritten or otherwise), agenda, bulletins, notices, announcements, instructions, charts, tables, manuals, brochures, magazines, pamphlets, lists, logs, telegrams, drawings, sketches, plans, specifications, diagrams, drafts,

books and records, formal records, notebooks, diaries, registers, analyses, projections, email correspondence or communications and other data compilations from which information can be obtained (including matter used in data processing) or translated, and any other printed, written, recorded, stenographic, computer-generated, computer-stored, or electronically stored matter, however and by whomever produced, prepared, reproduced, disseminated or made.

Without limitation, the term “control” as used in the preceding paragraphs means that a document is deemed to be in your control if you have the right to secure the document or a copy thereof from another person or public or private entity having actual possession thereof. If a document is responsive to a request, but is not in your possession or custody, identify the person with possession or custody. If any document was in your possession or subject to your control, and is no longer, state what disposition was made of it, by whom, the date on which such disposition was made, and why such disposition was made.

For purposes of the production of “documents,” the term shall include copies of all documents being produced, to the extent the copies are not identical to the original, thus requiring the production of copies that contain any markings, additions or deletions that make them different in any way from the original.

“Identify” means:

- (a) With respect to a person, to state the person’s name, address and business relationship (e.g., “employee”) vis-à-vis the Company;
- (b) With respect to a document, to state the nature of the document in sufficient detail for identification in a request for production, its date, its author, and to identify its custodian. If the information or document identified is recorded in electrical, optical or electromagnetic form, identification includes a description of the computer hardware or software required to reduce it to readable form.

“Relating to” or “concerning” means and includes pertaining to, referring to, or having as a subject matter, directly or indirectly, expressly or implied, the subject matter of the specific request.

“Workpapers” are defined as original, electronic, machine-readable, unlocked, Excel format (where possible) with formulas intact.

PRIVILEGE

If you claim a privilege including, but not limited to, the attorney-client privilege or the work product doctrine, as grounds for not fully and completely responding to any interrogatory or request for production, describe the basis for your claim of privilege in sufficient detail so as to permit the Proposed Intervenors or the Commission to evaluate the validity of the claim. With respect to documents for which a privilege is claimed, produce a “privilege log” that identifies the author, recipient, date and subject matter of the documents or interrogatory answers for which you are asserting a claim of privilege and any other information pertinent to the claim that would enable the Proposed Intervenors or the Commission to evaluate the validity of such claims.

TIME

Unless otherwise provided, the applicable time period for each of these requests for information is January 1, 2010 to the present.

DATA REQUESTS

1. Reference Robert M. Conroy, p. 13, ll. 2-4.
 - a) Once the Company determines the appropriate capacity for a generation asset “based on customers’ demands on the total system,” please explain how the Company determines whether that generation asset should be a baseload, cycling, or peaking plant.
 - b) Is Mr. Conroy’s contention that generation and distribution assets are sized based on the same measure of customer demand (e.g., system coincident peak)? If not, please describe in detail the different measures of customer demand that are relied on to size generation and distribution assets.
2. Reference Robert M. Conroy, p. 15, ll. 16-18.
 - a) Is it Mr. Conroy’s contention that recovering so-called demand-variant fixed costs through volumetric energy rates can lead to “unintended but unavoidable” intra-class subsidies? If so, please describe in detail the nature of such intra-class subsidies.
 - b) In Mr. Conroy’s opinion, would it be reasonable to assume that customers with relatively high energy usage would also have relatively high demands? Please explain.
3. Reference William Steven Seelye, at p.3, ll 2-4.
 - a) Please describe the degree to which the Company is experiencing competitive pressure from distributed generation.
 - b) Please state the number of distributed generation systems currently installed by customers on the Company’s system, their aggregate capacity, and the percentage of those systems powered by wind, solar, natural gas, or other resources.
 - c) Please provide any forecasts prepared by or for the Company regarding distributed generation growth in its territory.
 - d) Please provide the average monthly energy usage for all distributed generation customers, by class, for the latest 12 months for which such data are available.
4. Reference William Steven Seelye, at p. 3, ll. 6-7.

- a) Is the Company experiencing “steep declines in their sales per customer”?
5. Reference William Steven Seelye, p. 10, ll. 18-19.
- a) What RS energy charge would the Company propose in this case if the Basic Service Charge remained at \$10.75 per month?
 - b) Please provide in an electronic spreadsheet, with all cell formulas and file linkages intact, the calculation of the RS energy charge that the Company would propose in this case if the Basic Service Charge remained at \$10.75 per month.
6. Reference William Steven Seelye, p. 10, ll. 17-18.
- a) Please provide copies of all e-mail communications, internal memoranda, reports, or other documentation of Mr. Seelye’s or the Company’s consideration of the amount to increase the Basic Service Charge and of the decision to increase the Basic Service Charge to \$22.00 per month.
 - b) Please provide copies of all presentations to Company management or the Company’s Board of Directors regarding consideration of the amount to increase the Basic Service Charge and of the decision to increase the Basic Service Charge to \$22.00 per month.
7. Reference William Steven Seelye, p. 11, ll. 2-3.
- a) Please provide an electronic spreadsheet, with all cell formulas and file linkages intact, that shows the calculation of the proposed rates for the Variable Energy Charge and the Infrastructure Energy Charge.
 - b) Please provide copies of all workpapers, including electronic spreadsheets with cell formulas and file linkages intact, relied on to derive the proposed rates for the Variable Energy Charge and the Infrastructure Energy Charge.
8. Reference William Steven Seelye, p. 11, ll. 17-18.
- a) By “fixed costs associated with poles, transformers, conductors,” is Mr. Seelye referring to just the customer-related portion of those costs or both the customer-related and demand-related portions? Please explain.
 - b) By “fixed costs associated with ... power plants,” is Mr. Seelye referring to the demand-related portions of power plant costs? Please explain.
 - c) Please explain what Mr. Seelye means when he states that fixed costs would not be “automatically” reduced with reductions in energy usage. Could reductions in energy usage lead to reductions in such fixed costs in some other fashion?

- d) Is it Mr. Seelye’s contention that the “fixed costs associated with poles, transformers, conductors” would not be “automatically reduced” with reductions in customer peak demands? Please explain.
 - e) Is it Mr. Seelye’s contention that the “fixed costs associated with ... power plants” would not be “automatically reduced” with reductions in customer peak demands? Please explain.
9. Reference William Steven Seelye, p. 11, Table 3.
- a) Please provide an electronic spreadsheet version of Table 3, with all cell formulas and file linkages intact. Please provide copies of all linked electronic spreadsheet files.
 - b) Please provide copies of all workpapers, including electronic spreadsheets with cell formulas and file linkages intact, relied on to derive Table 3.
10. Reference William Steven Seelye, p. 13, Table 4.
- a) Please provide an electronic spreadsheet version of Table 4, with all cell formulas and file linkages intact. Please provide copies of all linked electronic spreadsheet files.
 - b) Please provide copies of all workpapers, including electronic spreadsheets with cell formulas and file linkages intact, relied on to derive Table 4.
11. Reference William Steven Seelye, p. 15, ll. 19-20.
- a) If distributed generation allowed the Company to reduce spending in the future on generation, transmission, or distribution capacity, would Mr. Seelye agree that all customers, and not just those who installed the distributed generation, would benefit from such a reduction in spending? Please explain.
 - b) If distributed generation allowed the Company to reduce spending in the future on generation, transmission, or distribution capacity, would Mr. Seelye agree that customers who installed the distributed generation would be subsidizing those customers who had not? Please explain.
12. Reference William Steven Seelye at p. 16, ll. 5-7.
- a) Please define “short term” in this context.

13. Reference William Steven Seelye at p. 16, ll. 15-18.
 - a) Please describe the rate design proposed in the New Mexico proceeding in which you were a witness, and provide the docket number for this proceeding.
14. Reference William Steven Seelye at p. 16, ll. 18-20.
 - a) Please identify the other utilities “considering the implementation of three- and multi-part rates for residential and small commercial customers,” and indicate whether these utilities have actually filed proceedings seeking approval for such rate designs and provide the associated docket numbers.
15. Reference William Steven Seelye, at p. 17, ll. 7-8.
 - a) Please identify the other utilities “considering the use of straight-fixed variable (‘SFV’) rate designs,” and indicate whether these utilities have actually filed proceedings seeking approval for such rate designs and provide the associated docket numbers.
16. Reference William Steven Seelye, p. 20, ll. 14-20.
 - a) Please clarify whether Mr. Seelye believes that all costs associated with the “service drop from the transformer” are customer-related. If so, please provide citations to the NARUC Electric Utility Cost Allocation Manual that form the basis for Mr. Seelye’s belief.
 - b) Please clarify whether Mr. Seelye recommends that all transformer costs, or just the customer-related portion of transformer costs, be recovered through the Basic Service Charge.
 - c) If Mr. Seelye recommends that all transformer costs be recovered through the Basic Service Charge, please explain why he believes that demand-related transformer costs should be recovered through the Basic Service Charge.
17. Reference William Steven Seelye, p. 23, ll. 7-9.
 - a) Please explain why the Company believes that intra-class subsidies should be avoided. Please cite to all relevant economic literature relied on as the basis for this belief.
 - b) Is Mr. Seelye aware of any economic rationale or ratemaking principle for maintaining intra-class subsidies? Please explain.

- c) Please cite to all relevant economic literature relied on as the basis for the assertion that the “rate making principle” for avoiding intra-class subsidies is the recovery of “fixed costs” through fixed charges.
 - d) Is it Mr. Seelye’s contention that demand-related generation, transmission, and distribution costs are “fixed costs”? If so, does Mr. Seelye believe that recovering such demand-related fixed costs through energy charges would create intra-class subsidies? Please explain.
 - e) Under the Company’s current rate design for residential customers, does Mr. Seelye believe that demand-related generation, transmission, and distribution costs are, and should be, recovered through the Basic Service Charge or through the energy charge? Please explain.
18. Reference William Steven Seelye, p. 23, ll. 10-15.
- a) Is it Mr. Seelye’s contention that the fixed costs to serve residential customers with above-average energy usage are equal to the fixed costs to serve customers with below-average energy usage? Please explain.
 - b) Please provide copies of all analyses conducted by Mr. Seelye or the Company relied on as the basis for Mr. Seelye’s assertion that residential customers with above-average energy usage are “paying more than their fair share of the utility’s fixed costs” under current rates.
19. Reference William Steven Seelye, p. 24, ll. 17-20.
- a) Has the Company undertaken any form of study of customer response to the RTOD-Demand rate option to determine why no customers have chosen to take service under this option? If so, please provide copies of any memoranda, reports, or other documentation of such studies.
 - b) Please explain why the current structure of the RTOD-Demand rate does not “accurately reflect costs.”
20. Reference William Steven Seelye at p. 25, ll. 9-10.
- a) Please provide the basis for your assessment that the demand charge structure currently in use for the Company’s large customers “seems to operate effectively,” including an explanation of what constitutes “effective” operation in this context.
 - b) Please provide copies of any internal memoranda, reports, or other documents in the Company’s possession that indicate that the demand charge structure currently in use

for the Company's large customers would "operate effectively" for residential customers.

21. Reference William Steven Seelye, p. 25, ll. 14-17.
 - a) Please provide an electronic spreadsheet, with all cell formulas and file linkages intact, that shows the calculation of the proposed rates for the base and on-peak demand charges.
 - b) Please provide copies of all workpapers, including electronic spreadsheets with cell formulas and file linkages intact, relied on to derive the proposed rates for the base and on-peak demand charges.

22. Reference William Steven Seelye, p. 94, ll. 11-13.
 - a) Did the Company estimate the customer component of pole costs separately from that for overhead conductors? If so, please explain how the customer component of pole costs was derived and provide the results of that analysis.
 - b) Did the Company estimate the customer component of underground conduit costs separately from that for underground conductors? If so, please explain how the customer component of underground conduit costs was derived and provide the results of that analysis.

23. Reference Exhibit WSS-2.
 - a) Please specify whether the results shown in Exhibit WSS-2 are based on the BIP or the LOLP cost of service study.
 - b) Please provide an electronic spreadsheet version, with all cell formulas and file linkages intact, of the cost of service spreadsheet model relied on to generate the results shown in Exhibit WSS-2.
 - c) Please provide an electronic spreadsheet version, with all cell formulas and file linkages intact, of Exhibit WSS-2. Please provide copies of all linked spreadsheet files.
 - d) Please provide copies of all workpapers, including electronic spreadsheets with cell formulas and file linkages intact, relied on to derive Exhibit WSS-2.
 - e) Please provide a revised electronic spreadsheet version (with all cell formulas and file linkages intact) of Exhibit WSS-2 that is derived from the results of a cost of service study which classifies 100% of pole, conduit, conductor, and line transformer costs as demand-related.

- i) Please provide an electronic spreadsheet version, with all cell formulas and file linkages intact, of the cost of service spreadsheet model relied on to generate the results for this revised version of Exhibit WSS-2.
- 24. Reference Exhibits WSS-13, WSS-14, and WSS-15.
 - a) Please provide electronic spreadsheet versions, with all cell formulas and file linkages intact, of these exhibits.
 - b) Please provide electronic versions, with all cell formulas and file linkages intact, of all linked spreadsheet files.
 - c) Please provide copies of all workpapers, including electronic spreadsheets with cell formulas and file linkages intact, relied on to derive these exhibits.
- 25. Reference William Steven Seelye, generally.
 - a) Please compare the proposed Basic Service Charges for all rate classes to the full customer-related cost identified for those classes in the cost of service study.
- 26. Reference Paul W. Thompson, p. 10, ll. 2-7.
 - a) Please identify and describe all expenditures during the test year relating to the Company's plans to comply with the Effluent Limitation Guidelines (ELGs). To the extent applicable, please indicate the generation plant(s) with which these expenditures are associated.
 - b) Please identify and describe all expenditures during the test year relating to the Company's plans to comply with the Coal Combustion Residuals (CCR) rule. To the extent applicable, please indicate the generation plant(s) with which these expenditures are associated.
 - c) Please identify and describe all expenditures during the test year relating to the Company's plans to comply with the tightening of NOx emission standards. To the extent applicable, please indicate the generation plant(s) with which these expenditures are associated.
- 27. Reference Paul W. Thompson, p. 51, ll. 5-8.
 - a) Please explain what is meant in this context by "a lesser standard."

28. Reference John P. Malloy, at p. 22, ll. 16-23.
- a) Please describe what means other than AMS are available to detect theft, meter configuration errors, and meter malfunctioning, as well as the cost of such measures.
 - b) Please confirm that the AMS-associated benefit of recovery on non-technical losses does not reduce overall system costs but rather changes the way in which those costs are recovered.
29. Reference John P. Malloy, at p. 25, ll. 2-3.
- a) Is the AMS technology proposed by the Company necessary for the imposition of demand charges on residential customers, or is less expensive metering technology available that could likewise provide demand readings?
30. Reference John P. Malloy, at p. 25, ll. 14-22.
- a) Would AMS also enable faster disconnection of customers for non-payment?
 - b) Would the Company consider consumer protections to mitigate the harms associated with accelerated disconnections for non-payment, such as disconnect notification by mail, extension to the time period allowed under the FLEX program, advance home visits to ensure that disconnection will not result in a health or safety issue, the availability of payment plan options for customers unable to pay their bill, or other such measures?
31. Reference John P. Malloy, at Exhibit JPM-1 pp. 22-23.
- a) Is AMS a prerequisite to the implementation of Volt/VAR optimization?
 - b) Please describe any ongoing efforts by the Company to evaluate the potential for, and benefits of, Volt/VAR optimization on the Company's systems.
32. Reference John P. Malloy, at Exhibit JPM-1 p. 32.
- a) Please provide further information regarding how the Company estimated the level of savings that will occur as a result of customers using energy more efficiently once AMS is installed. Specifically, does the Company assume that all residential customers will reduce their usage by 3%? If not, what percentage of customers does the Company assume will be "active users"?
 - b) What assumptions does the Company's estimate of savings associated with "customer empowerment" make regarding the timing of usage reductions (i.e., on-peak versus off-peak usage)?

- c) Do these estimated savings depend on rate design changes utilizing the AMS infrastructure?

33. Reference John P. Malloy, at Exhibit JPM-1 p. 34.

- a) How many full-time and part-time positions does the Company anticipate terminating as a result of reduced staffing needs for meter-reading and *ad hoc* field services? What is the anticipated timing of such terminations?
- b) Please describe any efforts the Company will make to retain staff previously tasked with meter reading and *ad hoc* field services in other positions.

Dated: January 11, 2017

Respectfully submitted,



Of counsel
(not licensed in Kentucky):

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Counsel for Sierra Club and Amy Waters

CERTIFICATE OF SERVICE

This is to certify that the foregoing copy of the INITIAL DATA REQUESTS OF SIERRA CLUB AND AMY WATERS TO LOUISVILLE GAS AND ELECTRIC COMPANY for full intervention in these actions is a true and accurate copy of the document being filed in paper medium; that the electronic filing was transmitted to the Commission on January 11, 2017;

that there are currently no parties that the Commission has excused from participation by electronic means in this proceeding; and that a copy of the filing in paper medium is being hand delivered to the Commission.



JOE F. CHILDERS