

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

In the Matter of:

**APPLICATION OF LOUISVILLE GAS)
AND ELECTRIC COMPANY FOR AN) CASE NO. 2014-00372
ADJUSTMENT OF ITS ELECTRIC RATES)**

**WALLACE MCMULLEN AND SIERRA CLUB’S INITIAL DATA REQUESTS
TO LOUISVILLE GAS AND ELECTRIC COMPANY**

Proposed Interveners Wallace McMullen and Sierra Club, pursuant to the Kentucky Public Service Commission’s (“Commission”) December 12, 2014 Order (“Scheduling Order”), 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 23, 2015 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/table/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

“DSM” means demand-side management programs including demand-response, interruptible load, and energy efficiency programs.

“Identify” means:

- (a) With respect to a person, to state the person’s name, address and business relationship (e.g., “employee”) to LG&E;
- (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 Intervenor 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 Intervenor 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 Testimony of Victor A. Staffieri, p. 8, ll.11-13.
 - a) What operations and maintenance costs will LG&E be able to avoid due to the flat sales growth the Company is experiencing?
 - b) What generation, transmission, or distribution projects has the Company been able to cancel or defer due to flat sales growth?
2. Reference Staffieri, p. 9, ll.11-20.
 - a) How much of L for Rate RTOD-Energy and Rate RTOD-Demand LG&E’s requested \$30 million increase in revenue requirement is attributable to the requested increase in return on equity to 10.5%?
3. Reference Testimony of Dr. Martin Blake, pp. 3-4.
 - a) Please provide working electronic spreadsheet versions, with all cell formulas and file linkages intact, of Schedules M-2.1, M-2.2, and M-2.3.
 - b) Please provide working electronic versions, with all cell formulas and file linkages intact, of all linked spreadsheet files.

4. Reference Martin Blake, p. 15, ll. 1-3.
 - a) Please confirm that demand-related secondary conductor costs were allocated using the SICD allocator.
 - b) Please provide the rationale for allocating demand-related secondary conductor costs on the basis of the sum of individual customer demands rather than on the basis of maximum class demand.
 - c) Does the Company employ guidelines for sizing of primary and secondary conductors? If so, please provide copies of such guidelines.
 - d) Please confirm that demand-related line transformer costs were allocated using the SICD allocator.
 - e) Please provide the rationale for allocating demand-related line transformer costs on the basis of the sum of individual customer demands rather than on the basis of maximum class demand.
 - f) Does the Company employ guidelines for sizing of line transformers? If so, please provide copies of such guidelines.
 - g) Has the Company studied the impact of load diversity on loadings on distribution equipment? If so, please provide copies of all such studies.
5. Reference Martin Blake, p. 19, ll. 9-18.
 - a) Please provide the rationale for not increasing the basic service charge to \$19.34 per month, as indicated by the cost of service study.
 - b) Please provide copies of all e-mail communications, internal memoranda, reports, or other documentation of Dr. Blake's and the Company's consideration of the amount to increase the basic service charge and of the decision to increase the basic service charge to \$18.00 per month.
 - c) Please provide copies of all presentations to Company management or the Company's Board of Directors regarding consideration of the amount by which to increase the basic service charge and of the decision to increase the basic service charge to \$18.00 per month.
6. Reference Martin Blake, p. 21, ll. 1-5.
 - 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 Dr. Blake 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 “ratemaking principle” for avoiding intra-class subsidies is the recovery of “fixed costs” through basic service charges.
 - d) Is it Dr. Blake’s contention that demand-related generation, transmission, and distribution costs are “fixed costs”? If so, does Dr. Blake 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 Dr. Blake believe that demand-related generation, transmission, and distribution costs should be recovered through the basic service charge or through the energy charge? Please explain.
7. Reference Martin Blake, p. 21, ll. 5-10.
- a) Is it Dr. Blake’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 Dr. Blake or the Company, relied on as the basis for Dr. Blake’s assertion that residential customers with above-average energy usage are “paying more than their fair share of fixed costs and margins” under current rates.
8. Reference Martin Blake, p. 22, ll. 11-13.
- a) What is the upper limit of the average monthly consumption that defines the “low-usage customers” who would be paying a higher energy bill once the alleged intra-class subsidy is removed?
 - b) Are the customer types identified on p. 22, ll. 11-13 comprehensive of the sub-class of low-usage customers defined by the threshold establish in (a)? Please explain.
9. Reference Martin Blake, p. 22, ll.20-22 through p. 23, ll. 1-3.
- a) How does the improper economic signal Dr. Blake refers to influence customer behavior?

- b) Does LG&E anticipate that fewer new residential service locations will be established once this “improper economic signal” is corrected?
10. Reference Martin Blake, p. 23, ll. 11-13.
- a) By “fixed production and transmission costs,” does Dr. Blake mean demand-related production and transmission plant costs? Please explain.
 - b) Would Dr. Blake agree that these production and transmission plant costs are “fixed” in the sense that they are sunk? Please explain.
 - c) Has Dr. Blake or the Company compared the proposed on-peak energy rate against a forecast of the generation and transmission costs avoided by a shift from on-peak to off-peak usage? If so, please provide copies of all workpapers or other documentation of such analyses.
 - d) Please provide the Company’s current forecast of avoided generation, transmission, and distribution costs used to screen DSM measures and programs for cost-effectiveness.
11. Reference Martin Blake, p. 24, ll. 17-26 and p. 25, ll. 1-10.
- a) Please confirm that the time periods shown in the tables are correct.
12. Reference Martin Blake, p. 25, ll. 16-30.
- a) Would the price signal to customers to reduce their load during the on-peak periods be greater if these customers paid a lower basic service charge and correspondingly higher on-peak rates? Please explain.
13. Reference Exhibits MJB-5, MJB-6, and MJB-7.
- a) Please provide working electronic spreadsheet versions, with all cell formulas and file linkages intact, of these exhibits.
 - b) Please provide working 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.
14. Reference Exhibits MJB-8 and MJB-9.
- a) Please provide a working electronic version, with all cell formulas and file linkages intact, of the cost of service spreadsheet model relied on to derive these exhibits.

- b) Please provide working electronic versions, with all cell formulas and file linkages intact, of all spreadsheet files linked to the cost of service spreadsheet model.
15. Reference Exhibit MJB-10.
- a) Please provide a working electronic spreadsheet version, with all cell formulas and file linkages intact, of this exhibit.
 - b) Please provide working electronic versions, with all cell formulas and file linkages intact, of all linked spreadsheet files.
16. Reference Exhibit MJB-11.
- a) Please provide a working electronic spreadsheet version, with all cell formulas and file linkages intact, of this exhibit.
 - b) Please provide working electronic versions, with all cell formulas and file linkages intact, of all linked spreadsheet files.
17. Reference Testimony of Robert Conroy, p. 24, ll. 6-9.
- a) What does Mr. Conroy mean by the phrase “more accurate” with regard to the effect on the “energy-pricing signal to customers” from the proposed increase to the basic service charge? Is it Mr. Conroy’s contention that the energy charge under the Company’s proposal will more accurately reflect the economic value of a reduction in customer load? Please explain.
 - b) In Mr. Conroy’s opinion, which rate design would provide the “more accurate energy-pricing signal to customers”: (1) setting the energy charge at the utility’s average variable cost; (2) setting the energy charge at the utility’s short-run marginal cost; or (3) setting the energy charge at the utility’s long-run marginal cost? Please explain and provide citation to the economic literature supporting Mr. Conroy’s opinion in this regard.
 - c) What does Mr. Conroy mean by the term “better,” in the phrase “better energy-efficiency behavioral and investment decisions”?
 - d) Is it Mr. Conroy’s contention that an increased basic service charge will not reduce the incentive for residential customers to alter their behavior to consume less energy, to invest in more energy-efficient technologies, or to participate in the Company’s DSM programs? Please explain.

- e) Has the Company evaluated or discussed the impact of the proposed increase in the basic service charge on participation in its residential demand-side management programs? If so, please provide all documents relating to that evaluation or discussion. If not, why not?
 - f) Please provide a copy of the Company's most recent study of marginal costs.
18. Reference Robert Conroy, p. 26, ll. 1-5.
- a) Was the average monthly consumption of 984 kWh for residential customers derived using historical data or forecasted data for the future test year? If the former, please describe the time period for the historical data.
 - b) Over the same time period as that used to derive the average monthly consumption for all residential customers (984 kWh), please calculate and provide the average monthly consumption for residential low-income customers (defined, for example, as those customers eligible to participate in the WeCare energy efficiency, FLEX payment, Project Warm, or Winterhelp programs).
 - c) Over the same time period as that used to derive the average monthly consumption for all residential customers (984 kWh), please provide the number of residential customers whose average monthly consumption falls between:
 - i) 0 kWh and 500 kWh;
 - ii) 501 kWh and 750 kWh;
 - iii) 751 kWh and 1,000 kWh;
 - iv) 1,001 kWh and 1,200 kWh;
 - v) 1,201 kWh and 1,500 kWh;
 - vi) 1,501 kWh and 2,000 kWh;
 - vii) 2,001 kWh and 2,500 kWh;
 - viii) 2,501 kWh and 3,000 kWh.
 - d) Over the same time period as that used to derive the average monthly consumption for all residential customers (984 kWh), please provide the average monthly consumption over all residential customers whose average monthly consumption falls between:

- i) 0 kWh and 500 kWh;
 - ii) 501 kWh and 750 kWh;
 - iii) 751 kWh and 1,000 kWh;
 - iv) 1,001 kWh and 1,200 kWh;
 - v) 1,201 kWh and 1,500 kWh;
 - vi) 1,501 kWh and 2,000 kWh;
 - vii) 2,001 kWh and 2,500 kWh;
 - viii) 2,501 kWh and 3,000 kWh.
- e) Over the same time period as that used to derive the average monthly consumption for all residential customers (984 kWh), please provide the number of low-income residential customers whose average monthly consumption falls between:
- i) 0 kWh and 500 kWh;
 - ii) 501 kWh and 750 kWh;
 - iii) 751 kWh and 1,000 kWh;
 - iv) 1,001 kWh and 1,200 kWh;
 - v) 1,201 kWh and 1,500 kWh;
 - vi) 1,501 kWh and 2,000 kWh;
 - vii) 2,001 kWh and 2,500 kWh;
 - viii) 2,501 kWh and 3,000 kWh.
- f) Over the same time period as that used to derive the average monthly consumption for all residential customers (984 kWh), please provide the average monthly consumption over all low-income residential customers whose average monthly consumption falls between:
- i) 0 kWh and 500 kWh;
 - ii) 501 kWh and 750 kWh;
 - iii) 751 kWh and 1,000 kWh;
 - iv) 1,001 kWh and 1,200 kWh;

- v) 1,201 kWh and 1,500 kWh;
- vi) 1,501 kWh and 2,000 kWh;
- vii) 2,001 kWh and 2,500 kWh;
- viii) 2,501 kWh and 3,000 kWh.

19. Reference Robert Conroy, p. 20, ll. 5-7.

- a) Please provide copies of all e-mails, memoranda, or other correspondence between the Company and Dr. Blake regarding the development and design of the two proposed optional rate schedules for residential customers.
- b) Please provide copies of all e-mails, memoranda, or other documentation provided to the Company by Dr. Blake of his proposed rate designs for the two optional rate schedules.
- c) Please provide copies of all memoranda, reports, or other documentation of the Company's evaluation of the rate designs proposed by Dr. Blake for the two optional rate schedules.

20. Reference Robert Conroy, pp. 26-29.

- a) Please provide all documents and communications relating to the success of Rate LEV in shifting consumption away from peak hours, and any other evaluation of customer behavior under the tariff.
- b) Did the Company compare the usage characteristics of Rate LEV customers to that of the residential class more generally? Please explain.
- c) Please describe the Company's analysis in determining what changes were needed in the opt-in time-of-day rates when removing the low-emission vehicle eligibility requirement from its opt-in residential time-of-day rate.

21. Reference Robert Conroy, p. 29, ll. 16-22 through p. 30, ll. 1-7.

- a) Is it Mr. Conroy's contention that the data from the digital meters must be collected through physical visits to the customer's premises?
- b) Please describe the process of "transfer[ring] the data into the Company's billing system." Is such data transfer done electronically or manually?
- c) Does the Company plan any improvements to its systems for collecting and processing these data to reflect a potentially large increase in the number of

customers taking service under Rate RTOD-Energy and Rate RTOD-Demand compared to Rate LEV?

22. Reference Robert Conroy, p. 30, ll. 19-21.
- a) Is it Mr. Conroy's contention that a higher basic service charge for Rate RTOD-Energy and Rate RTOD-Demand, compared to Rate RS, would be a barrier to customers' interest in taking service under the new rates? Please explain.
23. Reference Testimony of David Sinclair, pp. 26-27.
- a) Please provide the current number of CSR customers and the total CSR customer demand subject to curtailment.
 - b) Please provide the Company's estimate of the effect of the proposed changes to CSR tariffs on the number of CSR customers or customer demand subject to curtailment. Please provide copies of all workpapers relied on to derive these estimates.
 - c) Please provide copies of all e-mail communications, internal memoranda, reports, or other documentation of the Company's consideration of changes to the provisions of the CSR tariffs and of the decision to adopt the proposed changes.
 - d) Please provide copies of all presentations to Company management or the Company's Board of Directors regarding consideration of changes to the provisions of the CSR tariffs and of the decision to adopt the proposed changes.
 - e) Please state the basis for the Company's proposal to limit the total hours of curtailment to 100.
 - f) Has the Company evaluated any additional load control or demand response mechanisms in addition to the CSR? If so, please describe. If not, why not?
24. Reference David Sinclair, p. 28, ll. 6-18.
- a) Please state the number of times that a CSR customer has failed to perform in the last five years.
 - b) Has the Company evaluated whether the annual certification procedures it proposes to implement will affect participation in the CSR tariff in any way? If so, please provide copies of all e-mail communications, internal

memoranda, reports, or other documentation of the Company's consideration of this issue.

25. Reference Testimony of Paul Thompson, p. 17, ll. 4-18.
 - a) Please explain the need for the capacity purchase and tolling agreement in light of the flat sales growth environment the Company is currently experiencing.
26. Reference Paul Thompson, p. 22, ll. 15-18.
 - a) Please provide a copy of any request for permission to continue operating Green River Generating Station units through April 2016. If no such request has yet been submitted, please state whether it is still the Company's intention to submit this request and if so, when it will be filed.
 - b) Please provide any studies or documentation of the grid reliability concerns presented by the retirement of the Green River Generating Station units.
27. Reference Paul Thompson, p. 61, ll. 8-12.
 - a) Please provide all documents relating to the air conditioning load control program that has reduced summer peak demand by up to 181 MW. Has the Company considered expanding this program? Please explain.
28. Reference Testimony of William E. Avera and Adrien M. McKenzie, generally
 - a) How do your analyses and conclusions account for the reduced risk faced by the Company's investors should the Company's request to increase its fixed basic service charge for residential customers be granted in full.
 - b) If your analyses do not account for this proposal, why not?
 - i) How would your recommendations change if the entire requested basic service charge increase were approved by the Commission?
29. Reference Testimony of Edwin R. Staton, p. 4, ll. 10-24.
 - a) If LG&E's requested increase in the residential basic service charge is approved by the Commission, how will LG&E's residential basic service charge compare to the average basic service charge of investor-owned utilities across the United States?
30. Reference Staton, p.5, ll. 18-21.

- a) Please provide a copy of the bill notice discussing the proposed rate adjustment.
31. Reference Staton, pp. 5-10.
- a) How many customers are eligible for relief on their electricity bills through the Company's low- and fixed-income assistance programs, including WeCare, FLEX payment, Project Warm, Winterhelp Energy Assistance Fund, Home Energy Assistance Fund, and any other programs such as those distributing LIHEAP funds?
- b) What is the average monthly energy consumption for customers eligible for relief through all of the programs described in (a)?

Respectfully submitted,



JOE F. CHILDERS

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Dated: January 8, 2015

CERTIFICATE OF SERVICE

This is to certify that the foregoing copy of SIERRA CLUB'S INITIAL DATA REQUESTS TO LOUISVILLE GAS AND ELECTRIC COMPANY 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 8, 2015; 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