

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

INVESTIGATION OF KENTUCKY UTILITIES)	
COMPANY'S AND LOUISVILLE GAS AND)	
ELECTRIC COMPANY'S RESPECTIVE NEED)	
FOR AND COST OF MULTIPHASE)	CASE NO. 2015-00194
LANDFILLS AT THE TRIMBLE COUNTY)	
AND GHENT GENERATING STATIONS)	

DATA REQUESTS OF
KENTUCKY UTILITIES COMPANY AND
LOUISVILLE GAS AND ELECTRIC COMPANY
PROPOUNDED TO STERLING VENTURES, LLC

Kentucky Utilities Company ("KU") and Louisville Gas and Electric Company ("LG&E") (collectively, the "Companies") respectfully submit the following data requests to the Sterling Ventures, LLC ("Sterling").

Instructions

As used herein, "Documents" include all correspondence, memoranda, notes, e-mail, maps, drawings, surveys or other written or recorded materials, whether external or internal, of every kind or description in the possession of, or accessible to, Sterling, its witnesses, or its counsel.

Please identify by name, title, position, and responsibility the person or persons answering each of these data requests.

These requests shall be deemed continuing so as to require further and supplemental responses if Sterling receives or generates additional information within the scope of these requests between the time of the response and the time of any hearing conducted herein.

To the extent that the specific document, work paper, or information as requested does not exist, but a similar document, work paper, or information does exist, provide the similar document, work paper, or information.

To the extent that any request may be answered by a computer printout, spreadsheet, or other form of electronic media, please identify each variable contained in the document or file that would not be self-evident to a person not familiar with the document or file.

If Sterling objects to any request on the ground that the requested information is proprietary in nature, or for any other reason, please notify the undersigned counsel as soon as possible.

For any document withheld on the ground of privilege, state the following: date; author; addressee; indicated or blind copies; all persons to whom distributed, shown or explained; and the nature and legal basis for the privilege asserted.

In the event any document requested has been destroyed or transferred beyond the control of Sterling, its counsel, or its witnesses, state: the identity of the person by whom it was destroyed or transferred and the person authorizing the destruction or transfer; the time, place and method of destruction or transfer; and the reason(s) for its destruction or transfer. If such a document was destroyed or transferred by reason of a document retention policy, describe in detail the document retention policy.

If a document responsive to a request is a matter of public record, please produce a copy of the document rather than a reference to the record where the document is located.

Data Requests

1. Provide a list of all instances when Sterling's mining operations have been suspended, the number of days any such suspensions have lasted, and the reasons for the suspension. This list should include, but should not be limited to: (a) the suspension related to the death of Angela Common in May 2012; (b) any suspension related to the death of Melvin Jones in 2009; (c) any suspension related to the truck accident involving Sterling workers in September 2008; (d) any suspension related to the death of a Sterling worker in December 1999; and (e) any suspension related to the cave-in and entrapment of two Sterling workers in 1998.
2. Provide copies of any and all accident and/or injury reports related to accidents and/or injuries that have occurred at the Sterling mines in Kentucky during the last 20 years.
3. Provide copies and/or related documentation of any and all citations, fines, permit suspensions, violations and/or notice of violations issued to Sterling from any local, state, or federal agency within the last 20 years.
 - a. Has Sterling satisfied all outstanding fines or other penalties or obligations noted in response to Data Request No. 3? If not, why not, and when and how does Sterling plan to satisfy the remaining fines, penalties, or obligations?
 - b. How does Sterling's record of recordable incidents compare to the industry average for the past ten years?
 - c. What steps has Sterling taken to improve its safety performance?
4. Provide a copy of the Registered Permit by Rule for Beneficial Reuse of Special Waste referred to in Paragraph 20 of Sterling's Complaint.
5. Provide all supporting analyses and data possessed by Sterling that supports the determination that placement of Coal Combustion Residuals ("CCR") in the mine would meet Kentucky's beneficial reuse standards in 401 KAR Chapter 45, including analyses related to Kentucky's environmental performance standards at 401 KAR 30:031.
6. Provide a detailed description of the basis upon which Sterling relies for the position that disposal of the Companies' CCR in Sterling's mine constitutes a beneficial use under the federal CCR Rule published April 17, 2015 (80 Fed. Reg. 21302), and provide all supporting analyses and data, and specifically address:
 - a. The "functional benefit" that CCR would provide as referred to in the May 26, 2015 e-mail from Steve Souder to John Walters and any expected cost savings;

- b. The “virgin material” the CCR would be substituting as referred to in the May 26, 2015 e-mail from Steve Souders to John Walters; and
 - c. Whether managing CCR in Sterling’s mine would comply with federal CCR Rule requirements regulating environmental releases to groundwater, surface water, soil, and air as referred to in the May 26, 2015 e-mail from Steve Souders to John Walters.
7. Provide all documents relied upon by Sterling for its response to Item 6 above.
8. Provide all plans and maps that depict, in whole or in part, the following information:
 - a. The extent of underground mining works as of January 1, 2011, 2012, 2013, 2014, 2015 on each of the three limestone seams;
 - b. Mine ventilation plans and controls;
 - c. Future underground mining areas on each of the three limestone seams; and
 - d. The underground mine areas currently available for disposal, beneficial use (as defined in 40 CFR 257.53), or storage of CCR.
9. Provide a detailed description of the operating and management plan that is proposed for receipt, storage, transport, placement, and/or compaction of CCR at the mine’s surface facilities and within the mine, including any equipment that will be utilized for that purpose. Also address how CCR placement will be coordinated with active mining operations, including, but not limited to, any changes in ventilation or other operations. Please include in your descriptions how Sterling would handle and place wet CCR versus dry CCR, and any cost and logistical differences between management of the two.
10. Provide a copy of any reports or analyses prepared by consultants for Sterling or Sterling’s staff that evaluated the mine’s viability from a technical or economic standpoint, including, but not limited to, Morgan Worldwide’s greenfield evaluation and greenfield reports.
11. Provide information on any groundwater monitoring wells installed by Sterling in the vicinity of the mine, including location, surface elevation, bottom elevation, and monitoring data collected to date.
12. Provide all schedules in electronic format with cells intact and all work-papers, source documents, and electronic spreadsheets used in the development of Exhibit G to Sterling’s Complaint (Sterling’s Present Value Revenue Requirement of placing gypsum in the Ghent Landfill).

13. Provide all known examples where CCR has been or is being beneficially used or disposed of in underground limestone mines. For each such example, please state the source(s) of the CCR if known.
14. Provide audited financials for Sterling for the years 2006 – 2014.
15. Provide all correspondence from 2009 to date authored by any officer and/or director of Sterling (including but not limited to Alex Boone, Steve Evans, John Walters, and/or Tim Stout) to any person affiliated with Sterling related to the disposal or beneficial use of CCR at Sterling mines.
16. Provide minutes of all of Sterling’s board meetings from 2009 to date related to the disposal or beneficial use of CCR at Sterling mines.
17. Provide the date, location, and time of all discussions or conversations between Sterling personnel and any representative of any federal or state agency, including, but not limited to, the Kentucky Division of Waste Management (“DWM”) and the U.S. Environmental Protection Agency (“EPA”), and any other participants related to CCR disposal or beneficial use at any of Sterling’s mines.
 - a. Provide the names of all people involved in those discussions, their employment positions or titles, and any notes of those discussions, and describe the substance of those discussions.
18. Provide copies of all correspondence between Sterling personnel and any representative of any federal or state agency, including, but not limited to, DWM and EPA, and any other parties related to CCR disposal or beneficial use at any of Sterling’s mines.
19. Provide copies of all offers and/or proposals made to the Companies for CCR disposal or beneficial use at Sterling’s mines.
20. Provide copies of all offers and/or proposals to any entity for CCR disposal or beneficial use at Sterling’s mines from 2006-2015.
21. Provide the current amount of capacity at Sterling’s mines for the disposal or beneficial use of CCR, the disposal or beneficial use capacity for each year from 2011 to 2014, and the expected disposal or beneficial use capacity for each year from 2015 to 2055. Provide all workpapers and support for the capacity numbers provided, including annual sales figures from 2006 to 2014, as well as 2015 sales to date.
22. Please provide the contract terms for each and every contract for limestone sales that demonstrates the Sterling mine will have adequate available capacity for 37 years of disposal or beneficial use of CCR generated at Ghent and Trimble County Stations.

23. Provide copies of all contracts in place between Sterling and any entity for the disposal or beneficial use of CCR or other waste products at Sterling's mines.
24. Please provide a list of any and all sources of CCR that have been placed on property managed by Sterling Ventures including the limestone mine suggested for utilization of CCR materials from Ghent or Trimble County stations.
25. Identify the personnel and expertise in place at Sterling that enables Sterling to store CCR in accordance with all applicable regulations in the amounts produced by the Companies, including but not limited to MSHA, the Office of Surface Mining, and other mining regulatory authority standards. For each individual possessing such expertise, provide in detail their educational and vocational experience supporting that claimed expertise.
26. Provide all documents Sterling has received from government agencies or personnel regarding whether Sterling's proposed method of managing CCR in its mines is beneficial use or reuse under federal or state law.
27. Provide all analyses or studies Sterling has performed or caused to be performed that have evaluated whether CCR placed in Sterling's mines over the next 37 years will stay dry.
28. Provide all analyses or studies Sterling has performed or caused to be performed that have evaluated whether placing CCR in Sterling's mines will have any effect on surface or ground water.
29. Provide all analyses or studies performed or caused to be performed by Sterling regarding: the hydrogeological setting of the areas in Sterling's mines proposed for CCR disposal or beneficial use (including aquifer locations and groundwater flow patterns); surface water drainage and flow; and the potential hydrologic impact of storing CCR in the proposed locations.
30. Provide a copy of Sterling's long-term management plan for the disposal or beneficial use of CCR in its mines that existed at the time of the filing Sterling's Complaint in this matter. Provide a copy of any such plan developed since the filing of Sterling's Complaint.
31. Provide all schedules in electronic format with cells intact and all work-papers, source documents, all sources or other bases of cost estimates, and electronic spreadsheets used in the development of Exhibit S to Sterling's Complaint (Sterling's Present Value Revenue Requirement of Trimble CCR to Sterling Materials).
 - a. According to *Sterling's PVRR Alternative Analysis Support Document* included in Exhibit S, the estimated cost of the Barge On-Load and Off-Load Facilities was taken from Table III.D-3 on page 59 of 183 of the Companies' *Supplement to Alternatives Analysis*. The *Supplement to Alternatives Analysis* is included in Exhibit P.

- i. Were the capital costs in Table III.D-3 for General Project / Permitting / Infrastructure Cost Impacts (lines 1-10), CCR Transportation (lines 11-17), or Additional Capital Costs included in the Sterling analysis?
 - ii. If yes, how were they included in the analysis? If not, why not?
32. Provide all schedules in electronic format with cells intact and all work-papers, source documents, all sources or other bases of cost estimates, and electronic spreadsheets used in the development of Exhibit U to Sterling's Complaint (Sterling's Present Value Revenue Requirement of Trimble CCR to Sterling Materials).
33. Provide all schedules in electronic format with cells intact and all work-papers, source documents, all sources or other bases of cost estimates, and electronic spreadsheets used in the development of Exhibit V to Sterling's Complaint (Sterling's Present Value Revenue Requirement of Trimble CCR to Sterling Materials).
34. Provide all schedules in electronic format with cells intact and all work-papers, source documents, all sources or other bases of cost estimates, and electronic spreadsheets used in the development of Exhibit W to Sterling's Complaint (Sterling's Present Value Revenue Requirement of Trimble CCR to Sterling Materials).
35. If the Companies chose to use Sterling's mines as their sole disposal or storage site for CCR from the Trimble County Generating Station, what financial assurances could Sterling provide to the Companies to protect their customers from the effects of increased costs resulting from an interruption or reduction to the Companies' ability to store CCR in Sterling's mines?
36. To the extent not already provided, provide copies of all current and historical mine maps, mine-ventilation plans, and active void maps for the mine Sterling proposes to use to dispose of CCR.
37. Please describe all applicable requirements for managing ventilation in Sterling's mine and all past or current measures taken by Sterling to comply with those requirements or otherwise manage ventilation. Has Sterling Ventures built any concrete baffles in its limestone mine since it began operation?
38. How would Sterling propose to dispose of CCR in its mine if it were determined that such disposal would not be a beneficial use under the EPA's CCR Rule? Please include in your response all additional retrofit measures, costs, and logistical changes such disposal would require.

39. In Sterling's responses to questions from Mr. Straight in October 2014, Sterling indicated one option for trucking to the mine would involve staging the materials on-site on the surface at the mine prior to placement in the mine.
- a. Does Sterling have any permits that allow placement of CCR materials on-site prior to final placement in the mine? If not, when does Sterling intend to submit an application for a permit to allow such placement?
 - b. Describe how CCR would be managed on-site, and facilities used to ensure compliance with the federal CCR Rule.
 - c. How will rainwater and leachate from such staging of CCR materials be managed?
 - d. What will be the cost additions to the initial tipping fee identified by Sterling?
40. Please describe in detail Sterling's plan for transporting CCR from the barge unloading facility to the mine.
- a. What route will be taken?
 - b. How will the CCR be transported (e.g., by truck, by conveyor)?
 - c. What capital and on-going maintenance costs are included in the analysis to prepare and maintain the route for transporting CCR?
 - d. What permits will be required to transport CCR via this route?
 - e. If the CCR will be trucked from the barge unloading facility to the mine:
 - i. How many tons of CCR will each truck carry?
 - ii. On average, how many days per year will the trucks operate?
 - iii. On average, how many trucks will be required per day assuming 745,000 tons of CCR per year?
 - iv. Provide documentation of the projected costs per ton for transport.
 - v. If trucks are used between the facility and the mine, will any materials off-loaded at the river facility be staged at the facility prior to transferring to the mine for placement? If so, what permitting activity has been undertaken to allow such staging?
 - vi. How will the CCR material be removed from the barges prior to being placed in trucks or on conveyor?
 - vii. What is the expected duration to unload CCR from a barge?

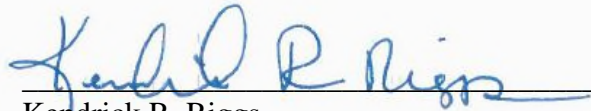
41. Sterling indicates that in December 2014 it became aware of a barge unloading permit that had been issued to the owner of an industrial parcel near its mine in Warsaw, KY.
 - a. Please provide any documentation indicating Sterling would have access to this facility.
 - b. When will the facility be constructed and provide all cost estimates for such construction?
 - c. Does Sterling currently own or have rights to utilize property between this unloading facility and its mine?
 - d. If CCR is to be transported from Trimble County to Sterling via barge, did Sterling plan to arrange and pay for barge transportation from the loading dock at Trimble County to the unloading dock at Warsaw, KY? What costs have been included in Sterling's estimates for this move?
 - e. In the Sterling proposal, who will be responsible for developing the barge unloading facility, maintaining barge fleet services at the dock, and assuming the risk associated with potential cost variances?
42. With regard to installing a barge unloading facility related to disposing of CCR from the Companies' Ghent and Trimble County coal-fired units:
 - a. Provide the date, location, and time of all discussions or conversations between Sterling personnel and any representative of any relevant permitting authority. Provide the names of the people involved in those discussions, their employment positions or titles, notes of those discussions, and describe the substance of those discussions.
 - b. Provide copies of all correspondence between Sterling personnel and any representative of any relevant permitting authority.
43. Please provide any documentation regarding the design and construction of a barge unloading system that would be sufficient to handle CCR from the Companies' Ghent and Trimble County coal-fired units, as well as the expected cost of such system.
44. Please describe how, in the absence of gypsum treatment (drying) equipment installed for Phase 1 of the Ghent landfill project, Sterling planned to transport the gypsum to the mine.
45. In the absence of gypsum drying facilities at Ghent, did Sterling plan to charge KU for dry tons or wet tons in its proposal?
46. As discussed in the informal conference at the KPSC, LG&E and KU's CCR material either requires to be dried (gypsum, bottom ash, partial fly ash sluiced

from the units) for landfill placement or partially wetted (fly ash removed from the Units dried).

- a. What costs have been included in Sterling's estimates to provide the conditioning (de-watering) of gypsum and bottom ash to allow the material to be transported off-site?
- b. Regarding fly ash, what costs have been included in Sterling estimates to convert the wet systems to dry removal systems and to partially wet the dry removed fly ash?
- c. What costs are included in Sterling's estimates for on-site storage at Trimble County for fly ash, gypsum and bottom ash for periods outside of the direct placement of CCR on barges or trucks for transport?

Dated: July 2, 2015

Respectfully submitted,

A handwritten signature in blue ink, reading "Kendrick R. Riggs", is written over a horizontal line.

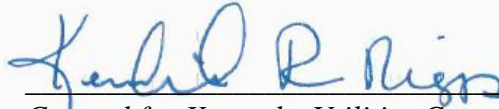
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*Counsel for Kentucky Utilities Company and
Louisville Gas and Electric Company*

CERTIFICATE OF COMPLIANCE

This is to certify that Kentucky Utilities Company's and Louisville Gas and Electric Company's July 2, 2015 electronic filing of the Data Requests is a true and accurate copy of the same document being filed in paper medium; that the electronic filing has been transmitted to the Commission on July 2, 2015; that there are currently no parties that the Commission has excused from participation by electronic means in this proceeding; and that an original paper copy of the Data Requests is being mailed, by first class United States mail, postage prepaid, to the Commission on July 2, 2015.

A handwritten signature in blue ink, reading "Gerald R. Nicks", is written over a horizontal line.

*Counsel for Kentucky Utilities Company and
Louisville Gas and Electric Company*