

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

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

ORDER

On June 26, 2009, Kentucky Utilities Company ("KU") and Louisville Gas and Electric Company ("LG&E") (collectively, the "Companies") filed separate applications in Case Nos. 2009-00197¹ and 2009-00198,² respectively, seeking multiple Certificates of Public Convenience and Necessity ("CPCN"), pursuant to KRS 278.020(1), in conjunction with their respective environmental compliance plans filed pursuant to KRS 278.183. In Case No. 2009-00197, KU requested, *inter alia*, authority to construct new landfills at the Ghent Generating Station ("Ghent Landfill") and the Trimble County Generating Station ("Trimble County Landfill") to deposit gypsum and coal ash. In Case No. 2009-00198, LG&E requested, *inter alia*, authority to construct the Trimble County Landfill. Because of their joint ownership of the Trimble County Generating Station Unit

¹ Case No. 2009-00197, *Application of Kentucky Utilities Company for Certificates of Public Convenience and Necessity and Approval of Its 2009 Compliance Plan for Recovery by Environmental Surcharge* (filed June 26, 2009).

² Case No. 2009-00198, *Application of Louisville Gas and Electric Company for Certificates of Public Convenience and Necessity and Approval of Its 2009 Compliance Plan for Recovery by Environmental Surcharge* (filed June 26, 2009).

2, KU and LG&E would co-own the Trimble County Landfill, with KU assuming 36 percent and LG&E assuming 39 percent of the Companies' share of the costs associated with the construction of the Trimble County Landfill.

KU stated that the new Ghent Landfill was to be constructed in three phases, with Phase I estimated to cost \$204 million and be completed within 18-24 months. The Companies proposed a four-phase construction of the new Trimble County Landfill, with Phase I estimated to cost \$94 million. The Companies would be responsible for 75 percent of the total cost of the new Trimble County Landfill, for an approximately \$70.5 million total.³ Phase I of the Trimble County Landfill was estimated to be completed by January of 2013. KU noted that the new landfills were required to comply with the Clean Water Act, the Resource Conservation and Recovery Act, and various state air quality environmental regulations.⁴ By Orders issued on December 23, 2009, in Case Nos. 2009-00197 and 2009-00198, the Commission granted KU a CPCN to construct the Ghent and Trimble County Landfills and LG&E a CPCN to construct the Trimble County Landfill, respectively.⁵

³ The remaining 25 percent of the Trimble County Landfill is to be owned by the Indiana Municipal Power Agency and the Illinois Municipal Electric Agency.

⁴ Case No. 2009-00197, *Kentucky Utilities Company* (Ky. PSC Dec. 23, 2009), Order at 7.

⁵ *Id.*; and Case No. 2009-00198, *Louisville Gas and Electric Company* (Ky. PSC Dec. 23, 2009).

On April 21, 2015, the Commission held a combined public hearing in Case Nos. 2014-00371⁶ and 2014-00372,⁷ involving the applications of KU and LG&E, respectively, to adjust their base rates. In the course of the cross-examination of the Companies' witnesses, Mr. Paul W. Thompson, Chief Operating Officer, responded to questions regarding the status of the Trimble County Landfill.⁸ Mr. Thompson testified that construction on the Trimble County Landfill has not yet begun, that the landfill is to be constructed in phases and that construction of the first phase will begin soon. Mr. Thompson expressed his belief that the approximately \$70 million cost to construct the Trimble County Landfill, as set forth in the Commission's December 23, 2009 Orders in Case Nos. 2009-00197 and 2009-00198, was the cost to construct only the landfill's first phase and that as originally proposed the total project consisted of four phases and the total cost would exceed \$460 million.⁹ Mr. Thompson stated that due to the passage of time, the total Trimble County Landfill project cost has increased by approximately 10 percent to bring the total cost to approximately \$500 million.¹⁰ While acknowledging that the Commission's Orders authorizing the Trimble County Landfill construction referred only to a total cost of \$94 million, which represented just Phase I, with KU and LG&E being responsible for 75 percent of that cost, Mr. Thompson stated that the

⁶ Case No. 2014-00371, *Application of Kentucky Utilities Company for an Adjustment of Its Electric Rates* (filed Nov. 26, 2014).

⁷ Case No. 2014-00372, *Application of Louisville Gas and Electric Company for an Adjustment of Its Electric and Gas Rates* (filed Nov. 26, 2014).

⁸ Case No. 2014-00371, *Kentucky Utilities Company*; and Case No. 2014-00372, *Louisville Gas and Electric Company*, Hearing Video at 11:28:06.

⁹ *Id.* at 11:30:03-11:30:40.

¹⁰ *Id.* at 11:35:28-11:36:05.

Companies interpreted the Orders as granting authority to construct all phases of the project.¹¹ When asked whether the Companies would submit an application to afford the Commission an opportunity to re-examine the Trimble County Landfill project, Mr. Thompson responded in the affirmative.¹²

On May 20, 2015, Sterling Ventures, LLC (“Sterling Ventures”), a business headquartered in Lexington, Kentucky, and a customer of KU, tendered a formal Complaint to the Commission wherein it alleged that the costs of the two landfills have dramatically increased. A copy of Sterling Ventures’ Complaint, without the voluminous exhibits, is set forth in the Appendix to this Order.¹³ Sterling Ventures, which owns and operates a limestone mine in Verona, Kentucky, states that, in the Companies’ respective Rate Applications in Case Nos. 2014-00371 and 2014-00372, the Companies indicated that Phase I of the Trimble County Landfill would cost over \$429 million, up from the \$94 million reflected in their CPCN Applications in Case Nos. 2009-00197 and 2009-00198. Similarly, Sterling Ventures states that the estimated cost of Phase I of the Ghent Landfill has risen from \$205 million to \$341 million.

Sterling Ventures asserts that its mine is located 17 miles from the Ghent Generating Station and 50 miles from the Trimble County Generating Station. Sterling Ventures notes that it has a Registered Permit by Rule for Beneficial Reuse of Special Waste for storing gypsum in its mine. It avers that depositing excess gypsum in its mine rather than in the Ghent Landfill would result in savings of \$41 million. Sterling

¹¹ *Id.* at 11:37:39-11:37:46.

¹² *Id.* at 11:38:04-11:38:19

¹³ Sterling Ventures’ Complaint with the exhibits is available for viewing on the Commission’s website at http://psc.ky.gov/PSC_WebNet/2015-00194.

Ventures states that in 2011 it presented its proposal to KU to construct only those portions of the Ghent Landfill necessary to deposit coal ash and to deposit the excess gypsum in the Sterling Ventures mine. Sterling Ventures notes that, of the estimated total cost to construct the Ghent Landfill, approximately \$53 million was related to storing gypsum plus ongoing operating and maintenance expenses.

In regard to the Trimble County Landfill, Sterling Ventures asserts that the present value savings for depositing gypsum in its mine rather than in the new Trimble County Landfill would be between \$46 million and \$257 million, dependent upon whether infrastructure to dry the coal combustion residuals is required. Accordingly, Sterling Ventures argues that the Trimble County Landfill is no longer the least-cost option, particularly due to the changing economic factors, including the mounting cost increases to construct the landfill. Sterling Ventures therefore requests that the Commission revoke the Companies' CPCNs with respect to the Trimble County Landfill and to limit KU's recovery of environmental costs related to the Ghent Landfill.

On May 22, 2015, the Companies tendered a Joint Application, using the Commission's electronic filing procedures, requesting a declaratory order affirming their authority to construct all phases of the Trimble County Landfill and to recover costs through their respective environmental cost-recovery mechanisms. In the Companies' Joint Application, which was docketed as Case No. 2015-00156, the Companies detailed the significant delays they have encountered in securing the necessary permits to construct the Trimble County Landfill, as well as the costs that have already been incurred, which are in excess of \$24 million. On June 3, 2015, Kentucky Industrial

Utility Customers, Inc.'s ("KIUC") petition to intervene was granted in Case No. 2015-00156.

Based upon a review of Sterling Ventures' Complaint and the Companies' Joint Application in Case No. 2015-00156, the Commission finds that one investigation should be initiated for the purpose of examining all of the issues raised regarding the need for, and the cost of, the multi-phase Trimble County and Ghent Landfills. Although the Commission is unable to determine at this time whether Sterling Ventures' Complaint establishes a *prima facie* case, we do find that Sterling Ventures has alleged sufficient facts to support our further investigation into the merits of its Complaint. The Commission further finds that the Companies' Joint Application and Sterling Ventures' Complaint raise issues in common and, in the interest of administrative economy, the Companies' Joint Application and Sterling Ventures' Complaint should be consolidated into this instant investigation pursuant to 807 KAR 5:001, Section 4(14). The Commission will utilize its electronic filing procedures for this investigation pursuant to 807 KAR 5:001, Section 8. All documents filed in the Companies' Joint Application, Case No. 2015-00156, along with Sterling Venture's Complaint, should be placed in this case file, Case No. 2015-00194, and Case No. 2015-00156 should be closed and removed from the Commission's active docket.

Finally, contemporaneous with filing their Joint Application in Case No. 2015-00156, the Companies moved the Commission to schedule an informal conference for the purpose of assisting in the understanding of the issues in that proceeding and to respond to any questions. On May 27, 2015, Sterling Ventures also tendered a motion requesting the Commission to schedule an informal conference. The Commission finds

that an informal conference would assist in the Commission's investigation of these issues and in the establishment of a procedural schedule, which should provide an opportunity for the Companies to respond to Sterling Ventures' Complaint and for all parties to file prepared testimony and to engage in discovery. For these reasons, the Companies' and Sterling Ventures' motion for an informal conference should be granted.

IT IS THEREFORE ORDERED that:

1. This case is established pursuant to KRS 278.040, KRS 278.250, and the electronic filing procedures set forth in 807 KAR 5:001, Section 8, to investigate:

a. The need for and cost of the multi-phase Trimble County and Ghent Landfills;

b. The issues raised in Sterling Ventures' Complaint; and

c. The Companies' Joint Application in Case No. 2015-00156.

2. The record of Case No. 2015-00156 is physically consolidated into this case and an Order shall be entered in Case No. 2015-00156 that:

a. Closes that case and removes it from the Commission's docket;
and

b. Makes all parties of Case No. 2015-00156 parties to this case.

3. All documents filed in the future relating to these issues shall contain only the caption of Case No. 2015-00194.

4. Sterling Ventures' Complaint is filed in and consolidated with this case for purposes of investigation and determination as to whether the Complaint alleges a *prima facie* case as required by 807 KAR 5:001, Section 20(4).

5. The pending motions for an informal conference are granted.

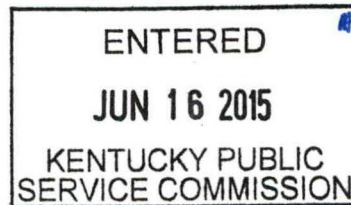
6. An informal conference shall be held on Friday, June 19, 2015, at 10:00 a.m. Eastern Daylight Time, at the Commission's offices at 211 Sower Boulevard, Frankfort, Kentucky, for the purpose of discussing the issues in this case and establishing a procedural schedule.

7. Unless Sterling Ventures files an objection to the use of electronic filing procedures within seven days of the date of this Order, Sterling Ventures shall:

a. Be deemed to have consented to the use of electronic filing procedures and the service of all documents, including Orders of the Commission, by electronic means; and

b. File within seven days from the date of this Order, a written statement, with a copy to parties of record, a certification that it, or its agent, possesses the facilities to receive electronic transmissions and sets forth the electronic mail address to which all electronic notices and messages related to this proceeding should be served.

By the Commission



ATTEST:

Executive Director

Case No. 2015-00194

APPENDIX

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2015-00194 DATED **JUN 16 2015**

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

RECEIVED

In the Matter of:

MAY 20 2015

STERLING VENTURES, LLC)
COMPLAINANT)

PUBLIC SERVICE
COMMISSION

vs.)

CASE NO. 2015-_____

KENTUCKY UTILITIES COMPANY)
DEFENDANT)

FORMAL COMPLAINT

1) By Order dated December 23, 2009, the Public Service Commission (the "Commission") granted Kentucky Utilities Company ("KU") and Louisville Gas and Electric Company ("LG&E") a Certificate of Public Convenience and Necessity (the "CPCN") (i) to build the first phase of a coal combustion residuals ("CCR") landfill at the Trimble County Generating Station ("the Trimble Landfill"), and (ii) to build the first phase of a CCR landfill at the Ghent Generating Station (the "Ghent Landfill")¹.

2) Pursuant to KRS §§ 278.260, 278.280(1) and 807 KAR 5:001 § 12, Sterling Ventures, LLC ("Sterling") requests that the Commission revoke the 2009 CPCN granted to KU and LG&E (the "Companies") to build the first phase of the Trimble Landfill, and to limit the environmental cost recovery surcharge paid by KU ratepayers for the Ghent Landfill.

3) The Companies have not been able to obtain the various federal and state permits required to begin construction of the Trimble Landfill. As explained below, since 2009, the design, capital

¹ *In the matter of Application of Kentucky Utilities Company for Certificates of Public Convenience and Necessity and Approval of Its 2009 Compliance Plan for Recovery by Environmental Surcharge*, KU Case No. 2009-00197 (the "2009 KU Application"), LG&E Case No. 2009-00198 (the "2009 LG&E Application") (Orders of December 23, 2009).

cost, location, operational expense and capacity requirements of the Trimble Landfill have dramatically changed, and it is now clear that the Trimble Landfill will not serve the public convenience, is not necessary and is unjust, unreasonable and improper. Due to a staggering increase in the capital cost of the first phase of the Trimble Landfill, a substantial reduction in the annual CCR capacity requirements of the Trimble Landfill and the availability of a less costly off-site disposal alternative for Trimble's CCR, the Trimble Landfill is unnecessary, and is a wasteful duplication of facilities.

4) Sterling also requests the Commission cap the environmental cost recovery surcharge (the "ECR") allowed on the Ghent Landfill. KU failed to take advantage of a known, less costly disposal alternative that would have substantially reduced the ECR.

I. PARTIES

3) Complainant, Sterling Ventures, LLC, is a KU customer, with its business office in Lexington, Fayette County, Kentucky, and is in the business of operating an underground limestone mine in Gallatin County, Kentucky. Sterling Ventures' business address is:

Sterling Ventures, LLC
376 South Broadway
Lexington, KY 40508

4) KU is a public utility, as defined in KRS § 278.010(3)(a), engaged in the business of furnishing retail electric service in the Commonwealth of Kentucky. KU's mailing address is:

Kentucky Utilities Company
Post Office Box 32010,
220 West Main Street, Louisville, Kentucky 40232.

II. JURISDICTION

5) The Commission's authority to review the CPCN for the Trimble and Ghent Landfills derives from KRS §§ 278.260(1) and 278.280(1).

III. FACTS

BACKGROUND

6) On December 23, 2009, the Commission granted LG&E and KU a CPCN to build the first phase of two multi-phase landfills at the Trimble and Ghent generating Stations to dispose of coal combustion residuals ("CCR"). The PSC approved recovery of the landfill construction, capital and operating cost through LG&E and KU's ECR.

7) In his filed testimony before the PSC in the 2009 KU Application, John Voyles, Vice President, Transmission and Generation Services for KU and LG&E, described the Trimble Landfill project as follows:

Project 32 -- Trimble County Station Landfill

Q. Please describe the new Trimble County Station landfill (Project 32), the anticipated cost and the associated timeline.

A. Project 32 consists of constructing the first phase (Phase I of four phases) of a new 210 acre onsite landfill at the Trimble County station. Phase I is expected to cost \$94.0 million (total). The total landfill project capital cost, with the inclusion of the Synthetic Materials and Holcim beneficial reuse contracts, is estimated to be \$551.4 million. The Synthetic Materials and Holcim beneficial reuse opportunities allow the deferral of future phases and the capital expenditures associated with those phases. Construction of Phase I is expected to take 18-24 months to complete and is expected to be in-service in January 2013.

As presented in Exhibit CRS-4, Coal Combustion Byproduct Plan for Trimble County Station, the total Phase I cost of the landfill is anticipated to be approximately \$94.04 million. The Companies will be co-owners of 75% of the landfill, with partners IMPA and IMEA owning jointly approximately 25%. The Companies will share the utility portion of the landfill, with LG&E

owning approximately 52% and KU owning approximately 48% of the facility. Accordingly, KU's share of the Phase I cost of the landfill is expected to be approximately \$33.86 million.²

8) Mr. Voyles similarly described the Ghent Landfill as follows:

Project 30 -- Ghent Station Landfill

Q. Please describe the new landfill at the Ghent Station (Project 30), the anticipated cost and the associated timeline.

A. Project 30 consists of the first phase (Phase I) of a three phase, new landfill construction project at the Ghent station for continued on-site management of CCP. Completion of this project requires the procurement of approximately 350 acres of land and relocation of approximately 2,500 linear feet of transmission line, existing underground utilities and a small cemetery (currently known to contain six burial plots). The project includes a transport system for the CCP material and the installation of a leachate collection/sediment retention pond. Phase I is expected to cost approximately \$204 million with a total project capital cost (Phases I-III) estimated to be approximately \$360 million. Phase I construction is expected to take 18-24 months to complete and is expected to be in-service by 2013.³

9) However, according to documents recently filed in the 2014 KU and LG&E Rate Increase Application, the Companies now project that Phase I of the Trimble Landfill will cost \$429.3 million – a staggering 457% increase over the original approved projected cost of \$94 million.⁴ (As Mr. Voyles described, the Companies effectively own 75% of the Trimble Generating Station, and therefore, the Companies' capital cost of Phase I has risen from \$70.5 million to \$322 million).

² 2009 KU Application, Direct Testimony of John Voyles, at 31-32.

³ *Id.* at 23-24.

⁴ See Exhibit A: *In re Application of Kentucky Utilities Company for an Adjustment of Its Electric Rates - Case No. 2014-00371* ("2014 Rate Increase Application"), Capital Review-Trimble County CCR, Attachment to Filing Requirement, 807 KAR 5:001, Section 167(7)(c)I, Witness K. Blake/Thompson, at 228 of 272.

10) The cost of the Ghent Landfill project has also exploded. Based on the 2014 Rate Increase Application, Phase I of the Ghent Landfill will now cost \$341 Million – \$137 million over the Commission's approved CPCN cost of \$205 million.⁵

11) Fundamental to the PSC's review of an application for a CPCN is the principal that the proposed project must be the least, reasonable cost alternative, and one that will not result in wasteful duplication.⁶ Kentucky Courts have defined wasteful duplication as "an excess of capacity over need" and "an excessive investment in relation to productivity or efficiency, and an unnecessary multiplicity of physical properties."⁷

12) Accordingly, if a chosen capital project requires the utility to invest substantially more to achieve essentially the same results as a lesser cost alternative, the utility is not fulfilling the requirement that capital expenditures be the least, reasonable cost alternative.

13) In addition to review of initial capital costs of project alternatives, the PSC also reviews projected future operating and maintenance costs over the life of the project.⁸

14) The accepted method in Kentucky for a utility to identify the lesser cost alternatives of various capital projects is to determine the Present Value Revenue Requirement (PVRR) of the capital and operational cost of each alternative.

⁵ *Id.* at 226 of 272.

⁶ See *Public Service Comm'n v. Continental Tel. Co.*, 692 S.W.2d 794, 799 (Ky. 1985) (where the court noted that a key objective the PSC must consider is whether the proposed utility project will result in the lowest possible cost to the ratepayers).

⁷ See *Kentucky Utilities Co. v. Public Service Comm'n*, 252 S.W.2d 885 (Ky. 1952).

⁸ See *In the Matter of: Application of Kentucky-American Water Company for a Certificate of Public Convenience and Necessity Authorizing Construction of the Northern Division Connection*, Case No. 2012-0096 (Order entered February 28, 2013) (approving an alternative where lower O&M expenses would eventually erase any initial difference in capital cost from a lower capital cost alternative).

15) KU and LG&E confirmed that the PVRR alternatives analysis is the proper method for determining the overall lowest cost alternative for CCR disposal, including comparing the cost of off-site disposal alternatives to the construction of new CCR landfills:

While many factors impact decisions on how to proceed (such as safety, ability to acquire needed permit(s), etc.) **present value of revenue requirements is used as the primary economic decision metric.** In some instances, additional cost metrics (such as cost per cubic yard or cost per ton) may also be quantified. Documentation for the evaluation is typically produced in close proximity to completing the evaluation. Often the supporting documentation is the source from which many internal and external presentations or business cases discussing the issue are developed. As previously stated, documentation regarding the alternatives is typically developed in coordination with consultants, however, the economic evaluation and associated documentation summarizing the economic evaluation is developed within E.ON U.S. At each decision point (such as formulation of alternatives, evaluation of options, development of documentation), oversight is built into the process to serve as a check. The function of this validation step is to subject the alternatives, evaluation or documentation to extensive "what ifs" and to confirm that a better alternative or solution does not possibly exist. **For example, is it possible that more favorable economics could not be achieved by selecting an alternative site or location?**⁹

16) Attached to this Complaint as Exhibits B and C are the PVRR Alternatives Analysis for each the Ghent Landfill and the Trimble Landfill, respectively.

17) Attached as Exhibits D and E are summaries of the projected capital and maintenance and operating costs for the Ghent and Trimble Landfills thorough 2018 that the Companies filed with the Commission as part of their respective 2009 Applications.

⁹ See 2009 KU Application and 2009 LG&E Application, Exhibit, *E.ON Comprehensive Strategy for Management of Coal Combustion Byproducts*, June 2009 (the "Comprehensive Strategy"), at 14 (emphasis added).

IV. ANALYSIS: STERLING VENTURES' DISPOSAL OPTIONS

1. Sterling's Ghent Proposal

18) Sterling Ventures, LLC owns and operates an underground limestone mine near Verona, Kentucky, approximately 17 miles from the Ghent Generating Station, and 50 miles from Trimble. Sterling has been mining on the site since 2000, and has mined and sold approximately 17,000,000 tons of limestone from the mine since its opening. Sterling currently mines between 900,000 and 1,500,000 tons of limestone per year. Average annual production is approximately 1,200,000 tons.

19) In addition to producing limestone for the general aggregate construction market, Sterling also mines high calcium limestone for Mississippi Lime Company for use in a lime kiln located on Sterling's property. This high calcium limestone exceeds Trimble's specifications for use as scrubber stone in Trimble's flue gas desulfurization ("FGD") scrubber system.

20) Sterling also has a Registered Permit by Rule for Beneficial Reuse of Special Waste issued by the Kentucky Department of Environmental Protection, Division of Solid Waste to use FGD gypsum in Sterling's mine.

21) In September 2011, Sterling presented KU an alternative proposal for the planned construction of the Ghent landfill (the "Ghent Gypsum Proposal"). Sterling proposed that KU utilize Sterling's beneficial reuse permit and construct only that portion of the proposed Ghent Landfill necessary for coal ash, and use Sterling's underground mine for Ghent's excess gypsum.

22) According to projections filed with the 2009 KU Application, capital costs directly attributed to improvements and equipment necessary for gypsum disposal were \$53.1 million of

the \$204 million Phase I Ghent landfill cost.¹⁰ In addition, operating expenses directly related to gypsum disposal were \$9.6 million of the projected \$19.6 million total annual operating and maintenance cost.¹¹

23) Attached as Exhibit G is Sterling's PVRR calculation of placing gypsum in the Ghent Landfill, based on the above capital cost assumptions, and the present value assumption in Exhibit B. The PVRR cost of placing gypsum in the Ghent Landfill would have been approximately \$275.5 million, with the "all-in"¹² cost for disposal in the Ghent Landfill in 2013 to be approximately \$19.43 per cubic yard, including transportation.¹³ Sterling proposed to place Ghent's gypsum in the mine for \$12.29 per cubic yard (\$10.50 per ton at 1.17 conversion).¹⁴ Even without considering the PVRR savings from delaying Phase II of the Ghent Landfill and completely eliminating Phase III, the PVRR savings for using Sterling's mine verses the Ghent Landfill would have been approximately \$41 million.¹⁵ Delaying the construction of Phases II and III (projected at the time to cost another \$157.4 million) would have dramatically increased the PVRR savings.

24) In addition, at the time Sterling presented the Ghent Gypsum Proposal, KU knew that Phase I of the Ghent Landfill project was already at least \$99 million over the projected cost

¹⁰ See Exhibit F, 2009 KU Application, Ghent Landfill (Phase I) Capital Expenditures, Attachment to Response to KIUC Question No. 1-4(a), at 1.

¹¹ *Id.*

¹² All-in cost charged to the Companies' ratepayers as an Environmental Surcharge is the sum of (i) the return on rate base (10.68% x net base), (ii) depreciation, (iii) taxes and (iv) operational and maintenance expenses.

¹³ See Exhibit G, Sterling's PVRR Calculation of Ghent Landfill Gypsum Disposal Cost.

¹⁴ See Exhibit H, Sterling's Ghent Station Alternative for CCP/Gypsum Disposal.

¹⁵ See Exhibit G, *supra* note 13.

presented to, and approved by, the Commission.¹⁶ (As noted above, KU now projects that Phase I will be \$137 million over budget.) If the improvements and equipment related to gypsum disposal caused the cost overruns, the PVRR savings noted above would have increased.

25) Sterling attempted numerous times between September and December 2011 to meet with KU and discuss the concepts presented and logistics of Ghent Gypsum Proposal. On December 12, 2011, Scott Straight, Project Engineer on the Ghent Landfill, responded by email with KU's determination that: "[T]his potential opportunity you have presented would not eliminate the need to construct the infrastructure required to process the by-products at Ghent, nor would it eliminate the construction of the landfill infrastructure. Instead, it potentially could have merit in a few years to defer the next phased expansion of the landfill [and] the next phase of the landfill is years away"

26) The decision not to pursue the Sterling mine alternative was improper. The opportunity to use Sterling's Beneficial Reuse Permit had arisen. (In fact, it had been available for over a year.) It was an immediate beneficial reuse opportunity, not a potential future opportunity. It was a current opportunity with a lower PVRR cost alternative that would have substantially reduced the cost, size and scope of Phase I of the landfill, and substantially delayed Phase II and eliminated the need for Phase III. Delaying the full PVRR review and analysis to some date in the future was completely contrary to KU's commitment to the Commission on the procedures that it would follow in making an unbiased decision on whether to spend capital, or to take advantage of a beneficial reuse opportunity.

¹⁶ See Exhibit I, 2014 Rate Increase Application, Capital Review-Ghent CCR, Attachment to Response to AG-1 Question No. 106, Witness K. Blake, at 819 of 1615.

All beneficial reuse opportunities will be screened, discussed, evaluated and documented (in conjunction with the current plan) **when their availability first becomes known** - not solely when a need for additional storage capacity has been identified, as the evaluation of each prudent reuse opportunity could provide a delay of the next phase of construction (emphasis added).¹⁷

27) KU improperly decided to spend \$53.1 million on gypsum specific infrastructure cost for the Ghent Landfill, use up valuable space in the landfill, incur an additional \$9.6 million per year transporting gypsum to the landfill, in order to determine at some time in the future whether all of that cost and expense was the least expensive alternative for gypsum disposal.

2. Proposed Trimble County Landfill

28) As of the filing of this Complaint, it has been over 5 years since the PSC granted KU and LG&E the CPCN for the Trimble County Landfill, and construction has not yet begun. The delay is the direct result of the Companies' inability to obtain the required state and federal permits necessary to begin construction. Relevant to this Complaint are two permits – a Landfill Construction permit from the Kentucky Division of Waste Management, Solid Waste Branch (“KDWM”), and a site permit from the U.S. Army Corps of Engineers (the “Corps”) for impacts to wetlands under Section 404 of the federal Clean Water Act (“CWA 404 Permit”)

29) An applicant for a CWA 404 Permit must demonstrate to the Corps that, among other things, the proposed project is the least environmentally damaging practicable alternative (LEDPA) to achieve the project's purpose, which must include, in addition to the environmental impact analysis, an accurate analysis of the cost of the considered alternatives. To determine the

¹⁷ See Comprehensive Strategy, *supra* note 9, at 13.

LEDPA, an applicant conducts a 404(b)(1) Alternatives Analysis.¹⁸ With respect to the “practical alternatives,” the regulations state:

An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. If it is otherwise a practicable alternative, an area not presently owned by the applicant which could reasonably be obtained, utilized, expanded or managed in order to fulfill the basic purpose of the proposed activity may be considered.

30) The CWA 404(b)(1) Guidelines require consideration of “overall” project costs when comparing LEDPA alternatives.¹⁹ According to the EPA, “[t]he determination of what constitutes an unreasonable expense should generally consider whether the projected cost is substantially greater than the costs normally associated with the *particular type of project*.”²⁰

31) The particular type of project in this case is construction by a regulated utility subject to Commission jurisdiction, and, as the Companies have acknowledged, the PVRR of the capital and operational cost of disposal alternatives is the recognized method of determining the lowest overall project cost. Therefore, the critical component of the 404(b)(1) Alternatives Analysis would be the overall project cost of each alternative on a PVRR basis. As detailed below, the Companies initially acknowledged that the PVRR comparative analysis method was the appropriate method for determining overall cost of alternatives. However, the Companies quickly abandoned that method as the appropriate alternative overall cost analysis as the cost of Phase I of the Trimble landfill exploded.

¹⁸ 40 C.F.R. § 230.10(a).

¹⁹ See 45 Fed. Reg. at 85339 (the practicability determination requires consideration of the “*overall scope/cost of the proposed project*”) (emphasis added).

²⁰ EPA, *Memorandum: Appropriate Level of Analysis Required for Evaluating Compliance with the Section 404(b)(1) Guidelines Alternatives Requirements*, at 3(b) (emphasis added).

a. *MACTEC 404(b)(1) Alternatives Analysis*

32) In December 2010, the Companies submitted their first application for the CWA 404 Permit to the Corps, which included a 404(b)(1) Alternatives Analysis prepared by MACTEC. After this initial filing, LG&E and KU met with the EPA and the Corp in May 2011 to discuss the Alternatives Analysis. As a result of that meeting, in March 2012, the Companies submitted a revised CWA 404 Permit application with a revised 404(b)(1) Alternatives Analysis prepared by MACTEC (the "MACTEC 2012 Analysis"), which is attached to this Complaint as Exhibit J.

33) The MACTEC 2012 Analysis was submitted 6 months after Sterling submitted its proposal to KU to use the underground mine as an alternative for gypsum disposal. However, MACTEC did not include Sterling's underground mine option in its comparative analysis.

34) It is clear that the MACTEC Analysis adopted the PVRR Alternatives Analysis used in filings with the Commission as the proper method of determining the least cost alternative under the 404 Alternatives Analysis. The Evaluation Criteria in the MACTEC Analysis included the following cost criteria:

Cost of Disposal/Storage – As a public utility regulated by the Public Service Commission, LG&E is required to seek out measures with the least cost to the ratepayers.²¹

35) The MACTEC 2012 Analysis concluded that chosen alternative of building the Trimble County Landfill in Ravine B "fulfills the responsibility of a publically regulated utility by the Public Service Commission to provide the least cost alternative to LG&E rate payers."²² The only

²¹ See Exhibit J, MACTEC Engineering and Consulting, Inc., *Section 404 Alternatives Analysis, Coal Combustion Residuals Storage Project, LG&E Trimble County Generating Station*, Issued December 2010 and Revised March 2012 (the "MACTEC 2012 Analysis"), at 1-2.

²² *Id.* at 6-3.

alternatives analysis prepared at the time of the MACTEC analysis was the PVRR comparative analysis used by the Companies in their respective 2009 Applications for the CPCN.

36) KU, LG&E and MACTEC also knew at the time they submitted the MACTEC Analysis that Phase I of the Ravine B Landfill Project was \$183 Million over budget (\$137 Million over budget net of IMPA/IMEA).²³

37) MACTEC also computed capacity requirements for Trimble CCR as follows:

2.2 NEED

Unit 1 currently generates approximately 367,571 tons of CCR per year and Unit 2 generates 480,142 tons of CCR per year for a combined annual CCR production of about 847,713 tons. Estimated annual CCR production rates are illustrated in **Table 1**. Tons of CCR are converted to CY to determine the pond or landfill volume required for storage of the material. The Trimble County Generating Station will exceed existing CCR storage capacity within approximately one year of bringing Unit 2 on-line. Due to lack of CCR storage, expansion of the on-site Bottom Ash Pond (BAP) and Gypsum Storage Pond (GSP) will address short term needs for CCR storage. To meet long term needs within the window created by these short term measures, LG&E has developed several alternatives to assess CCR storage options.

TABLE 1 LG&E Trimble County Generating Station Estimated Coal Combustion					
Units	Tons Per Year			TONS/CY	CY PER YEAR
Material	Unit 1	Unit 2	Total	Density	Volume
Pyrites	3,411	4,440	7,850	1.823	4,306
Bottom Ash	30,965	39,950	70,645	1.080	65,412
Economizer/ Duct Ash	4,263	5,550	9,813	0.810	12,115
Fly Ash	132,160	172,034	304,195	0.878	346,463
Gypsum	197,041	258,169	455,210	0.945	481,703
Total	367,571	480,142	847,713		910,000

²³ See Exhibit K, 2014 Rate Increase Application, Capital Review-Trimble County CCR, Attachment to Response to AG-1 Question No. 106, Witness K. Blake, at 820 of 1615.

38) In response to the MACTEC 2012 Analysis, Region 4 of the EPA expressed numerous reservations and issues with the Trimble Landfill. Specifically, in a letter dated April 25, 2012, the EPA concluded that the Companies' 404(b)(1) Alternatives Analysis was improperly overstating the required capacity of the landfill:

The applicant's alternatives analysis included as Appendix 1 of their CWA 404 permit application bases the evaluation of potential alternatives on a need to dispose of 910,000 cubic yards of CCR material annually throughout the anticipated 38-year lifetime of the facility's two power generating units (Mactec, rev. 2012). Many of the alternatives for CCR waste disposal considered, but eliminated from further consideration by LG&E were rejected due to the inability of those alternatives to accommodate the total 910,000 annual cubic yards of material. However, based on information provided by LG&E, the EPA believes that it will likely be unnecessary to dispose of this volume of CCR, and consequently, the applicant's alternatives analysis does not comply with the requirements of the Guidelines (40 CFR 230.12).

The total volume of CCR material generated at the Trimble County Generating Station is actually comprised of five different waste streams. As illustrated in Table 1, over 90-percent of this material consists of fly ash and synthetic gypsum. In its alternatives analysis, LG&E indicates that approximately 11 percent of the annual fly ash and bottom ash produced at the facility and approximately 93-percent of synthetic gypsum is adaptively reused. On December 8, 2011, representatives of LG&E verbally informed representatives of the EPA that up to 75-percent of its fly ash production may be reused. In fact, LG&E is presently constructing two new barge loading facilities at the Trimble County Generating Station to increase its capacity to facilitate adaptive reuse of its CCR material, one for fly ash and a second for gypsum.

The EPA believes that the actual volume of CCR material necessary for annual disposal may be between 17-percent and 46-percent of the 910,000 cubic yards used by LG&E in its alternatives analysis. Deducting the proportional volumes of reused material cited in the alternatives analysis results in a revised total waste volume necessary for disposal of approximately 417,000 cubic yards per year (Table 2), or 46 percent of the volume used in the alternatives analysis. Similarly, deducting the proportional volumes of material assuming reuse of up to 75 percent of fly ash and bottom ash reduces the total annual volume for disposal to approximately 153,000 cubic yards per year (Table 2), or 17 percent of the volume used in the alternatives analysis.

[. . .]The EPA believes it is inconsistent with the intent of the Guidelines to discount potentially practicable alternatives based, at least in part, on the inability of those alternatives to provide a storage volume that ignores the already

demonstrated volumetric reductions in CCR as a result of adaptive reuse. Even further reductions in the necessary storage capacity are likely as evidenced by LG&E's laudable commitment to facilitate CCR reuse and its stated goals to significantly increase the quantity of material reused. These considerations warrant a more detailed alternatives analysis in order to properly consider all appropriate and practicable measures to minimize potential harm to the aquatic ecosystem, as required by the Guidelines. In the absence of such an analysis, identification of the least environmentally damaging practicable alternatives cannot be made definitively.²⁴

39) In addition to the above issues raised by the EPA, the KDWM's review of the Landfill Construction Permit found problems with the Landfill's proposal. In March 2013, KDWM notified the Companies that it would be denying the permit application after concluding that the Landfill, as initially proposed, would fill a natural karst cave, and violate the Kentucky Cave Protection Act.

b. *GAI Consultants 404(b)(1) Alternatives Analysis*

40) In January 2014, the Companies submitted another revised CWA 404 Permit application to the Corps for the Trimble Landfill using the alternative location that avoided the karst cave. However, the 404(b)(1) Alternatives Analysis included in this new application was prepared by GAI Consultants, not MACTEC. A copy of the GAI Alternatives Analysis is attached as Exhibit M.

41) The GAI Consultants report for the first time included specific cost data for each alternative disposal option. However, because the Companies knew that the cost of Phase I of the Trimble Landfill had, by this time, increased by over 400%²⁵, and that a cost PVRR analysis

²⁴ See Exhibit L, Letter from James D. Giattina, Director, Water Protection Division, U.S. Environmental Protection Agency, to Colonel Luke T. Leonard, District Engineer, Louisville District Corps of Engineers (April 25, 2012) at 2-3, enclosure Table 2 .

²⁵ See Exhibit N, *2014 Rate Increase Application*, Capital Review-Trimble County CCR, Attachment to Response to AG-1 Question No. 106, Witness K. Blake, at 141 of 1615.

would not show that Ravine B was the lowest cost alternative, the Companies abandoned the PVRR comparative analysis method in favor of a limited specific cost method.²⁶

42) The Companies however did address the beneficial reuse issue the EPA voiced in its April 25th letter, and analyzed the disposal alternatives assuming a projected a 30% beneficial use of CCR (637,000 cubic yards per year).²⁷

43) The EPA responded to the new GAI Alternatives Analysis in a letter to the Corps dated July 11, 2014, and again expressed concerns that the Companies' new 404(b)(1) Alternatives Analysis was insufficient:

We do not believe that the applicant has adequately demonstrated that the proposed alternative to fill nearly 17 miles of headwater stream represents the least environmentally practicable alternative, consistent with the Guidelines. The alternatives analysis should more clearly and completely describe the process by which the least environmentally damaging practicable alternative was identified. The information provided to date appears to rely considerably on undocumented or undefined cost information and with very little to no comparative analysis of the range of environmental impacts associated with different alternatives that were considered or estimated compensatory mitigation costs.

...
The EPA believes that potentially feasible alternatives may have been eliminated in the alternatives analysis based on incompletely vetted economic considerations and that these sites warrant closer scrutiny.²⁸

44) The EPA followed up its July 11, 2014 letter with another letter to the Corps dated August 7, 2014. Specifically at issue was the failure to identify and evaluate a known disposal alternative:

²⁶ See Exhibit M, GAI Consultants, Inc., *Alternatives Analysis Report, LG&E and KU Services Company, Trimble County Generating Station Landfill Project*, January 2014 (the "GAI Alternatives Analysis"), at Attachment 5.

²⁷ *Id.* at Figure A-9, note 5.

²⁸ See Exhibit O, Letter from James D. Giattina, Director, Water Protection Division, U.S. Environmental Protection Agency, to Colonel Luke T. Leonard, District Engineer, Louisville District Corps of Engineers (July 11, 2014), at 2.

In addition, since providing the July 11, 2014, comment letter, the EPA has learned of a potentially feasible alternative not considered by the applicant. Sterling Ventures, LLC owns and operates an underground limestone mine in Gallatin County, Kentucky that holds a Special Waste Facility permit from the Kentucky Division of Waste Management (KDWM) to accept synthetic gypsum produced during the flue gas desulfurization (FGD) process at the Kentucky Utilities Ghent Power Station to fill mine voids in the mined out sections of the underground mine. It is the EPA's understanding that, subsequent to KDWM's issuance of the Special Waste Facility permit for Sterling Ventures which had originally identified the Ghent Power Station as a source of FGD, Kentucky Utilities elected to dispose of this material on-site of the Ghent Power Station instead of utilizing the Sterling Ventures mine. Based on information contained in the Sterling Ventures permit application approved by KDWM (summarized in enclosure 1), the mine may have the storage- capacity necessary to accommodate all of the CCR material generated by the LG&E Trimble County Generating Station. Use of the existing Gallatin County site would likely significantly reduce impacts to wetlands, surface waters, floodplains and groundwater resources in comparison to those impacts associated with construction and operation of the proposed new landfill. In addition, according to KDWM, it would require only a permit modification to the Sterling Ventures Special Waste Facility permit in order to allow for storage of CCR generated at the Trimble County Generating Station. Pursuant to 40 C.F.R. § 230.10(a), it is the applicant's responsibility to consider all practicable alternatives and to select a practicable alternative that does not involve a special aquatic site unless it can be clearly demonstrated that one is not available. The EPA believes that opportunities to utilize the underground limestone mine to store CCR from the Trimble County Generating Station warrant careful consideration as a potentially feasible alternative.²⁹

c. Supplemental 404(b)(1) Alternatives Analysis

45) In response to the most recent EPA letters, KU and LG&E filed a Supplement to the GAI Consultants original 404(b)(1) Alternatives Analysis with the Corps in December 2014.³⁰ For the first time, in this Supplemental Alternatives Analysis, the Companies' addressed the Sterling beneficial use option as an alternative.

²⁹ *Id.* Letter from Heather McTeer Toney, Regional Administrator, U.S. Environmental Protection Agency, to Colonel Christopher G. Beck, District Engineer, Louisville District Corps of Engineers (August 7, 2014), at 2.

³⁰ See Exhibit P, excerpts from Lee Wilson and Associates, Inc., et al., *Supplement to Alternatives Analysis, LG&E and KU Services Company, Trimble County Generating Station Landfill Project*, December 2014 (Exhibit P includes portions of the Supplemental Analysis applicable to this Complaint).

46) The Supplemental Analysis did include an analysis of the Kentucky law with respect to the cost analysis applicable when issuing a CPCN.³¹ However, the Companies concluded that the accepted method of examining the lowest cost alternative for public utility projects based on the PVRR of the project should not apply to the 404(b)(1) Alternatives Analysis:

No consideration is given to timing factors that are common in many types of financial analyses, such as for a rate-of-return determination. There is no adjustment for inflation on future operations costs, possible future increases in energy costs, discounting to bring future costs to present value, or return on investment if operation costs are fully funded on Day 1 but only expended over time. LG&E considers the gross costs for construction and 37 years of operations to provide the fairest comparison of relative costs among alternatives.³²

47) The only conclusion to be drawn from the Companies' position is that the Trimble Landfill was no longer the lowest cost PVRR alternative when viewed in the traditional manner of analyzing the costs of alternative long-term public utility project options.

48) With respect to the beneficial use and capacity issue raised by the EPA, the Companies flip-flopped again, and abandoned the 30% beneficial reuse assumption used in GAI's January 2014 Alternatives Analysis. In the Supplemental Analysis the Companies decided to ignore their history of beneficial reuse of CCR from Trimble and the long-term beneficial reuse contracts in place, and based the Supplemental Alternatives Analysis on the need for a landfill for 100% of annual CCR production:

The volume of CCR produced at the TC Station is projected to average approximately 910,000 cubic yards per year, with an uncertain potential for waste reduction through beneficial use. For planning purposes, the total waste volume is estimated to be on the order of 33.4 million cubic yards over the nearly 37 year minimum lifetime that remains for the TC Station.³³

³¹ *Id.* Appendix III.D-2 at 140 of 183, Kentucky Public Service Commission Consideration of Least-Cost Alternatives Certificates of Public Convenience and Necessity.

³² *Id.* Appendix III.D-1 at 116 of 183, Methods for Assessment of Costs, at 2.

³³ *Id.* at Section I. Introduction, at 1 (page 5 of 183)

49) By abandoning any reasonable estimate of beneficial use, the Companies are improperly ignoring existing executed contracts to purchase a minimum of 50% of Trimble CCR over the next 16 years. As indicated above in the EPA's April 25, 2012 letter, the Companies indicated a substantial amount of CCR was being beneficially reused.³⁴ In addition, attached is various information Sterling has discovered from internet research related to CCR beneficial use at Trimble, which further confirms the EPA discussions with the Companies.³⁵

3. Sterling's Trimble Proposal

50) As noted above, in August of 2014, the EPA specifically questioned the omission of Sterling's underground mine as part of the CWA 404 Alternatives Analysis for the Landfill. When Sterling discovered the August 2014 letter, it contacted Scott Straight, Director of Project Engineering for the Companies, by email to inquire if the Companies were interested in meeting to discuss using the Sterling mine as an alternative CCR disposal site for Trimble's CCR.³⁶

51) Mr. Straight responded by email on October 3, 2014 stating that as a result of the EPA's August 2014 letter, the Companies were now evaluating Sterling's mine as an alternative CCR disposal option, and he requested basic information as a preliminary step in his analysis. On October 24, 2014 Sterling responded to Mr. Straight's questions by email, but specifically noted that the responses were based upon limited knowledge of specific details concerning how the CCR would be staged at the plant, and the contemplated terms of the contractual obligations between the parties. Sterling noted that it may be appropriate to meet and discuss any issues and questions

³⁴ See Exhibit L, *supra* note 24, at Attachment.

³⁵ See Exhibit Q.

³⁶ See Exhibit R, E-mail from John Walters, General Counsel/CFO, Sterling Ventures, LLC, to Scott Straight, Director of Project Engineering, LG&E and KU (Sept. 24, 2014)..

regarding its responses, as well as meet with the USACE and KDWM. Sterling based its proposal on transporting the CR by truck. However, Sterling indicated that it would be interested in discussing the option of constructing a new barge facility near Sterling's mine for CCR transportation.³⁷

52) On October 31, 2014, Mr. Straight emailed Sterling that no more information was required to allow them to complete their evaluation. There was no request to meet, discuss or obtain any additional information on the barge option.³⁸

53) On December 1, 2014, Sterling discovered that a barge permit had been issued to the owner of an industrial parcel of property in Warsaw, Kentucky near Sterling's mine. Sterling immediately contacted Mr. Straight by email about this development to ask if he would be interested in discussing the possibilities of this barge site. Mr. Straight responded on December 5, 2014 questioning whether an existing barge load-out facility was physically on the new site. Sterling responded that same day telling Mr. Straight that the riverside improvements were in place, but construction of a new load-out facility would be required. After that brief email exchange, Sterling heard nothing more from the Companies. Sterling sent two additional emails on December 11, and December 30, 2014 asking Mr. Straight if he wanted to sit down and talk about the newly discovered barge site option, with no response.³⁹

³⁷ *Id.* E-mail from Scott Straight, Director of Project Engineering, LG&E and KU, to John Walters, General Counsel/CFO, Sterling Ventures, LLC (Oct. 3, 2014); E-mail from John Walters, General Counsel/CFO, Sterling Ventures, LLC, to Scott Straight, Director of Project Engineering, LG&E and KU (Oct. 24, 2014).

³⁸ *Id.* E-mail from Scott Straight, Director of Project Engineering, LG&E and KU, to John Walters, General Counsel/CFO, Sterling Ventures, LLC (Oct. 31, 2014)

³⁹ *Id.* E-mail from John Walters, General Counsel/CFO, Sterling Ventures, LLC, to Scott Straight, Director of Project Engineering, LG&E and KU (Dec. 1, 2014); E-mail from Scott Straight, Director of Project Engineering, LG&E and KU, to John Walters, General Counsel/CFO, Sterling

54) Sterling has prepared a PVRR comparative analysis of CCR disposal in the proposed Trimble Landfill verses in Sterling's underground mine (the "Sterling PVRR Analysis") based on using the Warsaw barge location.⁴⁰ Attached to the Sterling PVRR Analysis are assumptions on which Sterling based its calculations.

55) Sterling is projecting that, based upon 30% beneficial reuse, its mine option is by far the least cost alternative from a PVRR standpoint, and will save the Companies' ratepayers \$256,915,601 on a PVRR basis over the life of the project (total savings of \$491,983,428). The "all in cost" charged to the Companies ratepayers for using the Sterling option in 2018 is \$23.83 per cubic yard, verses \$75.41 per cubic yard disposing of CCR in the Trimble Landfill.⁴¹

56) The Sterling PVRR Analysis, attached as Exhibit S, also assumes that the Companies will not need to construct the CCR Treatment infrastructure to dry the CCR. The Companies currently transport CCR to buyers for beneficial reuse without treating the CCR.⁴² However, even if the Companies spend an additional \$152.3⁴³ (net of IMPA/IMEA) for infrastructure necessary to treat the CCR before shipment to Sterling, the Sterling landfill is still the lowest cost alternative, with a PVRR that is \$46.7 million lower than the Trimble Landfill option.⁴⁴

Ventures, LLC (Dec. 5, 2014, 02:58 EST); E-mail from John Walters, General Counsel/CFO, Sterling Ventures, LLC, to Scott Straight, Director of Project Engineering, LG&E and KU (Dec. 5, 2014, 04:26 EST); *id.* (Dec. 11, 2014); *id.* (Dec. 30, 2014).

⁴⁰ See Exhibit S, Sterling's PVRR Analysis of Trimble CCR to Sterling Materials.

⁴¹ *Id.*

⁴² See Exhibit J, MACTEC 2012 Analysis, *supra* note 21, at 3-1 to 3-2.

⁴³ See Exhibit T, 2014 Rate Increase Application, Project Engineering 2015 Business Plan, Attachment 1 to Response to Sierra Club Question No. 2.7, Witness Voyles, at 2 of 11. (Note that Sterling added the summary of cost at Bottom of Projected Engineering 2015 Business Plan).

⁴⁴ See Exhibit U, Sterling's PVRR Analysis of Trimble CCR to Sterling Materials.

57) In addition, as beneficial use increases, the cost savings from the Sterling option increase dramatically due to the enormous cost of Phase I of the landfill. Attached as Exhibits V and W are Sterling's PVRR comparative analyzes with CCR volume reductions as set forth in Scenarios 1 and 2 of the April 25, 2012 EPA letter (assuming the requirement of having to build the treatment infrastructure as a following analysis from Exhibit U).⁴⁵ If the total CCR capacity required is reduced to 416,709 cubic yards from beneficial use (EPA Scenario #1), the PVRR cost savings increases from \$46,699,283 to \$67,764,060, and increases to \$82,441,874 under EPA Scenario #2 (153,109 cubic yards).

58) As Exhibits U, V and W indicate, when landfill construction costs are pushed into Phase I, substantial cost saving from increased beneficial use are essentially lost. The enormous up front infrastructure costs are "sunk cost," and future beneficial use options are therefore only compared to the landfill's operational cost. As a result, a future beneficial use option has a higher cost hurdle to overcome, thereby reducing the viability of the future options, which then results in more CCR placed in the landfill, leading to the necessity of building all landfill phases.

59) As indicated earlier, in response to the EPA's comments in its August 2014 letter, the Companies did finally address the option of using Sterling's mine as an alternative to the Trimble Landfill. The Supplemental Analysis included a barge/conveyor option for Sterling's mine that contemplated building a massive conveyor system up a steep mountain with accompanying roads, bridges and ancillary facilities, on a parcel of property adjacent to Sterling's mine (the "Adjacent Parcel Barge Plan")⁴⁶. This construction alternative was a complete surprise to Sterling. Given the

⁴⁵ See Exhibit L, Letter from James D. Giattina, Director, Water Protection Division, U.S. Environmental Protection Agency, to Colonel Luke T. Leonard, District Engineer, Louisville District Corps of Engineers (April 25, 2012).

⁴⁶ See Exhibit P, Table III.D-3 at 59 of 183

complexity and issues involved with the Adjacent Parcel Barge Plan, it is surprising that not one representative of the Companies ever contacted Sterling to request a meeting, ask any question about the Adjacent Parcel Barge Plan, explore options, discuss and resolve potential issues, or obtain any information of any kind from Sterling concerning the Adjacent Parcel Barge Plan. This is even more surprising given that Sterling is in the business of moving materials by conveyor over long distances.

60) According to the Supplemental Analysis, the Adjacent Parcel Barge Plan would have a capital cost \$75.2 million (net of IMPA and IMEA). Given the option for a barge facility near Warsaw, KY., the Adjacent Parcel Barge Plan is overly complex, expensive and unnecessary.

V. LEGAL ANALYSIS OF PSC REVIEW

61) The Commission has the authority to review a previously approved CPCN:

A proceeding that examines the continued need for approved facilities in light of drastically changed economic conditions, however, is distinguishable from merely reopening a closed proceeding. Old issues are not re-litigated. New evidence not previously in existence at the time of the original proceedings and economic conditions not reasonably foreseeable at the time of the original proceedings is considered to determine if construction of the approved, but uncompleted, facilities is still necessary, reasonable and economically prudent. The Commission has previously initiated new proceedings to examine the continued need for approved facilities. As to this allegation, we have subject matter jurisdiction.⁴⁷

62) The commission has previously held that in circumstances substantially identical to the case at hand, a review of a CPCN is appropriate:

While the Commission does not typically investigate issues that have already been adjudicated, there are unique facts and circumstances relating to Smith 1 that justify this course of action. They include the passage of over 3.5 years since the date the Commission approved the facility and all necessary permits still not obtained by

⁴⁷ *In the Matter of Chris Schimmoller and Connie Lemley v. Kentucky American Water Company*, Case No. 2009-00096 (Ky. P.S.C. 2009).

East Kentucky, a very substantial escalation in the estimated cost of construction, and issues raised by three retail customers in a separate complaint case challenging Smith 1 as neither needed nor least-cost.⁴⁸

63) It has now been over five (5) years since the date the Commission approved Phase I of the Trimble Landfill, and the Companies still have not obtained all necessary permits required for construction. By the Companies' own admissions, if the Corp agrees to issue the CWA 404 Permit, the resulting litigation will delay construction for at least one more year. The projected cost for building the Landfill have increased by over 400%, and based upon cost overruns after the Companies began construction of the Ghent Landfill, the cost of the Trimble Landfill will most likely increase even more than it already has increased. Finally, a viable, less costly alternative to building the Trimble Landfill has emerged that would eliminate the need for the Landfill.

64) Upon the Commission determining that there has been a drastic change in the economics on which a CPCN is based, or when a more economically viable alternative has emerged, Kentucky law prevents the Companies from building the Trimble Landfill until the Commission's review of the CPCN determinations that "public convenience and necessity require the service or construction."⁴⁹

65) As a condition of the Commission granting the CPCN for a new facility, it must determine that there is both a need for the facility and "an absence of wasteful duplication resulting from the construction of the new system or facility."⁵⁰ This statutory mandate is designed to avoid "wasteful duplication" and to foreclose "excessive investment in relation to productivity or efficiency, [or] an unnecessary multiplicity of physical properties." *Id.* To demonstrate that a

⁴⁸ *In the Matter of Application of East Kentucky Power Corporative, Inc.'s Need for the Smith 1 Generating Facility*, Case No. 2010-00238 (Ky. P.S.C. 2010).

⁴⁹ KRS § 278.020(1).

⁵⁰ *Kentucky Utilities Co. v. Public Service Com'n*, 252 S.W.2d 885, 890 (Ky. 1952).

proposed facility does not result in wasteful duplication, the Commission has held that the applicant must demonstrate that a thorough review of all reasonable alternatives has been performed.⁵¹

66) When reviewing a CPCN application, the Commission has the authority to "issue or refuse to issue the certificate, or issue it in part and refuse it in part."⁵² The Commission's review is guided by the overall requirement that utility rates are "fair, just, and reasonable."⁵³ The Commission has consistently recognized that "'least cost' is one of the fundamental principles utilized when setting rates that are fair, just, and reasonable."⁵⁴

67) The Commission also has the authority to modify any order or decision under 278.930, which provides in pertinent part: "Every order entered by the commission shall continue in force... until revoked or modified by the commission"

VI. CLAIMS FOR RELIEF

CLAIM ONE (MULTIPLE CHANGES IN SITUATION)

68) Complainant incorporates by reference paragraphs 1 - 67.

⁵¹ *In the matter of Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a Certificate of Public Convenience and Necessity for the Construction of Transmission Facilities in Jefferson, Bullitt, Meade, and Hardin Counties, Kentucky Case No. 2005-00142* (Ky. P.S.C, 2005).

⁵² KRS § 278.020(1).

⁵³ KRS § 278.030(1); KRS § 278.040; *Kentucky Public Service Com'n v. Com. ex rel. Conway*, 324 S.W.3d 373, 377 (Ky. 2010).

⁵⁴ *In the Matter of Application of Kentucky Power Co.*, Case No. 2009-00545 (Ky. P.S.C. 2010).

69) Numerous changes since the Commission issued the CPCN for Phase I of the Trimble Landfill in 2009 indicate that the construction of the Trimble Landfill is not needed or convenient.

These include:

1. The capital cost of Phase I of the Trimble Landfill has increased dramatically;
2. Environmental Regulations defining the classification of CCR have been issued; and
3. A less costly alternative for CCR disposal is now available.

70) Therefore, the construction of the Trimble Landfill will result in wasteful duplication.

CLAIM TWO
(BREACH OF CONDITION OF GRANTING CPCN)

71) Complainant incorporates by reference paragraphs 1 - 67.

72) The Commission granted the CPCNs for the first phases of the Trimble and Ghent Landfills based and conditioned upon the direct testimony of LGE/KU representatives, and documents entered into the record. The testimony and documents state that KU would pursue, and fully analyze, future beneficial reuse opportunities in order to reduce or eliminate the Landfills' capital costs and their operating and maintenance costs.

73) With respect to the Sterling Ventures mine option, KU has failed to follow the procedures that it committed to the Commission would be used in evaluating and capturing future beneficial reuse opportunities that would reduce the impact of ECR surcharges on KU's ratepayers.

74) The failure to follow those procedures has resulted in KU needlessly increasing Ghent's ECR Rate Base, and, as a result, is improperly charging its ratepayers for unnecessary environmental compliance costs.

VII. PRAYER FOR RELIEF

75) Therefore, for the reasons stated above, the Complainant respectfully requests that the Commission:

- (i) revoke the CPCN with respect to the Trimble Landfill;
- (ii) conduct a review and evaluation of KU's analysis and decision process with respect to Sterling Ventures' beneficial reuse opportunity for Ghent and Trimble CCR;
- (iii) disallow ECR recovery of any operating and maintenance cost and capital expenditures associated with flue gas desulfurization ("FGD") gypsum disposal in the Ghent Landfill above and beyond the PVRR cost of gypsum placement in the Sterling mine;
and/or
- (v) provide all other relief that is just and proper.

Respectfully submitted,
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