Steven L. Beshear Governor

Leonard K. Peters Secretary Energy and Environment Cabinet



Commonwealth of Kentucky

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David L. Armstrong Chairman

James W. Gardner Vice Chairman

Daniel E. Logsdon Jr. Commissioner

September 9, 2015

PARTIES OF RECORD

Re: Case No. 2015-00264

Attached is a copy of a memorandum which is being filed in the record of the above-referenced case. If you have any comments you would like to make regarding the contents of the memorandum, please do so within five days of receipt of this letter. If you have any questions, please contact Molly Katen, Staff Attorney, at (502) 782-2591.

Sincerely

Jeff Derouen

Executive Director

INTRA-AGENCY MEMORANDUM

KENTUCKY PUBLIC SERVICE COMMISSION

TO:

Case File No. 2015-00264

FROM:

Molly Katen, Staff Attorney

DATE:

September 9, 2015

RE:

Informal Conference of September 3, 2015

Application of Louisville Gas and Electric Company and Kentucky Utilities

Company Regarding Entrance into Refined Coal Agreements, for Proposed Accounting and Fuel Adjustment Clause Treatment, and for

Declaratory Ruling

Pursuant to the Commission's August 26, 2015 Order, an informal conference ("IC") was held in this matter on September 3, 2015 at the Commission's offices in Frankfort, Kentucky. Louisville Gas and Electric Company and Kentucky Utilities Company ("LG&E/KU") requested the IC for the purpose of discussing any issues relating to their application and any other matter that may aid in the handling and disposition of this matter. A list of the attendees is attached hereto.

At the start of the IC, it was brought to LG&E/KU's attention that the letter filed under seal as Exhibit 9 of their application appeared to be different from what was intended to be filed. LG&E/KU agreed and stated they would file a motion to withdraw that letter and file a copy of the correct letter.

LG&E/KU representatives gave a presentation (see attached handout) in which they discussed the reasons behind the refined coal application, as well as components of the application itself, including the logistics of the refined coal treatment process and LG&E/KU's proposed accounting treatment of the net benefits to be received from the proposed agreements. If the application is approved, LG&E/KU anticipate entering into Operation Agreements with subsidiaries of Clean Coal Solutions, Inc. ("CCS") that will govern LG&E/KU's and CCS's arrangement with respect to the refined coal treatment process at three of LG&E/KU's generating stations – Ghent, Mill Creek, and Trimble County. In summary, the refined coal process involves LG&E/KU selling coal feedstock to the operator of Coal Refining Facilities ("Facilities") that will be installed on site at the three generating stations, the operator treating the coal and then selling it back to LG&E/KU at the same price that the coal feedstock is sold to the operator. CCS currently owns 28 Facilities, with three such Facilities not currently slated to be in

service. The Facilities are certified to produce refined coal that would qualify for a production tax credit of approximately \$6.60 per ton. The Facilities' tax life will expire at the end of 2021.

LG&E/KU stated that the Facilities are already built and are currently stored in a warehouse and that, upon receiving Commission approval, they would be transferred to the three generating station sites. It is expected to take approximately 16-18 weeks to relocate and install the Facilities. All permit modifications have been applied for and approved for the Facilities. After commencing commercial operations of each Facility, CCS will either sell or lease its Facilities to a tax equity investor, but will continue to be the operator of the Facilities. If a tax equity investor does not purchase the Facilities, the Operation Agreements would likely be terminated by CCS.

The Operation Agreements have provisions that allow the operator to purchase coal from a third party for sale to LG&E/KU and/or a person or entity other than LG&E/KU. However, LG&E/KU stated that they do not anticipate the operator buying coal from a third party and that LG&E/KU would not be required to assist the operator in any way under such a scenario.

Although use of the Facilities to treat the coal would not enable LG&E/KU to comply with environmental regulations, it will help reduce mercury and nitrogen oxide ("NO $_x$ ") emissions. A test burn performed at the Trimble County station showed some emission reductions. The coal is refined through a chemical process that occurs as the coal moves along the power plant's existing conveyor through the Facility. The conveyer carries the coal feedstock through a belt scale which weighs the coal feedstock to be sold. This measured weight also serves as the weight at which the refined coal is re-purchased by LG&E/KU. After being weighed, the feedstock coal passes through the Facility where Materials "A" and "B" are applied to produce the refined coal. Material A is a slurry chemical that is applied to the coal feedstock to reduce NO $_x$ emissions. Material B is a liquid chemical that is applied to the coal feedstock to reduce mercury emissions. After being treated, the conveyor transports the refined coal to the plant's coal storage silos.

The benefits inured to LG&E/KU under the refined coal proposal arise from fees they will charge for use of the generating station sites and coal yard services they will provide to the operator of the Facilities. If the transaction to sell and repurchase the coal is subject to the Commonwealth's severance tax, the tax costs will be netted against the fee revenues. LG&E/KU are requesting approval to record the net benefits received in fuel inventory so that 100 percent of those benefits would go to retail customers via the Fuel Adjustment Clause ("FAC"). Commission Staff asked whether LG&E/KU would be agreeable to recording the net benefits as a regulatory liability rather than include the benefits in the FAC calculation. LG&E/KU stated that they have requested the same treatment here as in filings made with the Virginia State Corporation Commission and the Federal Energy Regulatory Commission and that it would be problematic to have different accounting treatments in different jurisdictions. LG&E/KU also stated that they did not foresee a situation in which coal severance costs

would exceed the revenue from the site licensing and coal yard services fees but, if it did occur, they would commit to "hold" the extra costs and apply them the following month. LG&E/KU also addressed the pending ruling from the Kentucky Department of Revenue in regards to the coal severance tax and stated that they were still waiting confirmation.

In order to take full advantage of the benefits to be derived from the proposal and to ensure that they would be able to obtain the Facilities in a timely manner, LG&E/KU request an Order from the Commission by October 15, 2015. After a brief discussion, Commission Staff and LG&E/KU agreed that a Commission Staff data request would be furnished by September 15, 2015, with LG&E/KU responses due September 25, 2015. Kentucky Industrial Utility Customers, Inc. ("KIUC") indicated that it would let the parties know the following day whether it would be submitting any data requests.¹

There being no further discussions, the IC was adjourned.

Attachments

¹ Counsel for KIUC notified Commission Staff counsel and LG&E/KU's counsel by email on September 4, 2015 indicating that KIUC would not have any discovery regarding LG&E/KU's application. A copy of KIUC's email is attached to this memorandum.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF LOUISVILLE GAS AND)	
ELECTRIC COMPANY AND KENTUCKY UTILITIES)	CASE NO.
COMPANY REGARDING ENTRANCE INTO)	2015-00264
REFINED COAL AGREEMENTS, FOR PROPOSED)	
ACCOUNTING AND FUEL ADJUSTMENT CLAUSE)	
TREATMENT, AND FOR DECLARATORY RULING)	
	j	

September 3, 2015

Please sign in:

NAME	REPRESENTING
Nancy Vinsel	PSC-Legal
Kurt Boehm	KIUC counsel -telephonic
Elang D Upreyer	PSC
Cary M. Pfeiffer	LG+E and KU Energy
X DR Rigar	Stofa LOTE - KU
allyson Sturier	Core/Ku
DELBERT BILLITER	LGSE/KU
Chris Gurett	LGAE / KU
Lobert Conray	LCOE/KU
Matthew Baer	PSC-FA
John P. Fendis	LG+F/KU
JOHN SHUPP	PSC-ENGR.

My whelm	PSC-FA
Mary Beth Parris Molly Katen Jeff Shaw	PSC-FA
Molly Katen	PSC-Legal
Jeff Shaw	PSC-Legal PSC-FA
<i>711</i>	
	-



Informal Conference Case No. 2015-00264

September 3, 2015













Overview

- The driver for the Refined Coal project is the Section 45 Production Tax Credit
 - The Production Tax Credit was established to encourage the development of new technologies to reduce emissions at coal-fired generation stations and promote the creation of jobs.
 - Refined Coal is coal that has been treated (refined) to reduce nitrogen oxide and mercury or sulfur dioxide emissions.
 - Refined Coal qualifies for the Production Tax Credit (currently ~\$6.60 per ton)
 - Refined Coal facilities have a tax life of 10 years from the placed-in-service date and all will currently expire 4th Qtr. 2021.
- LG&E/KU will be entering into Operation Agreements with affiliates of Clean Coal Solutions, LLC (CCS)
 - CCS will purchase coal from LG&E/KU, use it to produce Refined Coal, and sell the Refined Coal to LG&E/KU for use in its generators
 - CCS will pay LG&E/KU for services it provides to CCS under the agreement
- LG&E/KU are requesting approval to record the net benefits received to fuel inventory so that they may be shared with retail customers via the Fuel Adjustment Clause (FAC).

Who is Clean Coal Solutions?

- CCS is the developer and owner of the Refined Coal Facilities being considered by LG&E/KU.
- CCS is owned by ADA, NexGen Resources, Goldman Sachs and Republic Financial.
- CCS owns 28 facilities; 17 are in operation and 7 more are expected to be in service before the end of the year.
- CCS facilities are currently operating in 11 states, including the TVA Paradise Fossil Plant in KY.



Project Due Diligence

- LG&E/KU Corporate Fuels was approached by CCS in the fall of 2014.
- Met with CCS at the Ghent Station--representatives from the plant, Generation Engineering, and Corporate Fuels.
- Evaluated other Refined Coal technologies.
- Evaluated the potential impacts of Refined Coal with industry combustion experts.
- Assembled a due diligence team with representatives from Ghent, Mill Creek, and Trimble County Stations, Generation Engineering, Environmental, Corporate Fuels, and Legal.
- Discussions with other utilities hosting Refined Coal Facilities.
- Due diligence team visited Baldwin Station in Illinois to tour a CCS Refined Coal facility and meet with Baldwin staff about their experience.
- Conducted a test burn at Trimble County Station.



Refined Coal Project Structure

- CCS, as the owner of the Facility and initial "Producer" of the Refined Coal, will enter into Operation Agreements with LG&E/KU that will permit CCS to install and operate Facilities at up to three stations.
 - CCS will, at its cost, install and operate the Facilities for the term 2015 2021.
 - CCS will purchase coal feedstock from LG&E/KU, produce Refined Coal, and sell it back to LG&E/KU (at the same price) for use in its generators.
 - CCS will pay LG&E/KU a Site License Fee and a Coal Yard Services Fee.
 - Fees collected are not subject to refund if tax credits are later denied.
- CCS will sell or lease its Facilities to tax equity investors after the commencement of commercial operations of each Facility.
 - The tax equity investors are typically larger commercial or financial companies with ability to utilize the tax credits.
- LG&E/KU will negotiate new agreements with the tax equity investors. Fees and major terms expected to remain the same as the Operation Agreement.



Estimated Annual Benefit to LG&E/KU Customers

LG&E and KU

Refined Coal Project Estimated Annual Benefit September 3, 2015

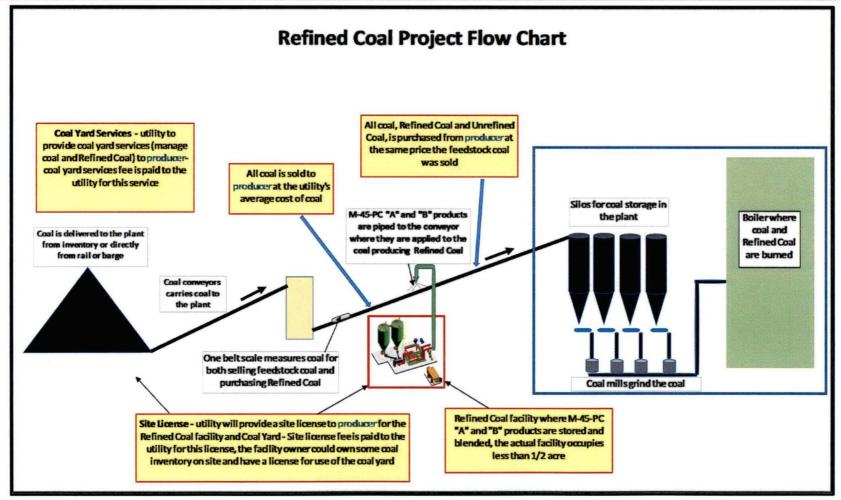
Station		Ghent	N	lill Creek	Trim	ble County	To	tal System
Estimated Annual Benefit	\$	10,098,000	\$	5,940,000	\$	4,851,000	\$	20,889,000
LG&E/KU Portion of the Estimated Annual Benefit ¹	\$	10,098,000	\$	5,940,000	\$	3,638,250	\$	19,676,250
Allocation by Utility ²								
Estimated Annual Benefit to LG&E	\$		\$	5,940,000	\$	1,954,260	\$	
Estimated Annual Benefit to KU	¢	10,098,000	\$					7,894,260
Estimated Annual Benefit to KO	Y	10,056,000	Þ	-	\$	1,683,990	\$	11,781,990
Estimated Annual Benefit to KO Estimated Portion of Annual LG&E/KU Benefit for	Ţ	10,058,000	ş	•	Ş	1,683,990	\$	

Notes:

- 1. For Trimble County the LG&E/KU benefit is based on its ownership portion of 75%.
- 2. The Trimble County LG&E and KU benefit allocation is based on TC2 ownership of 81% KU and 19% LG&E and does not include any estimated allocation resulting from energy supplied from one utility to the other.
- 3. Estimate based on 2014 KY retail sales volumes (kwh) 86% of total KU sales volumes.



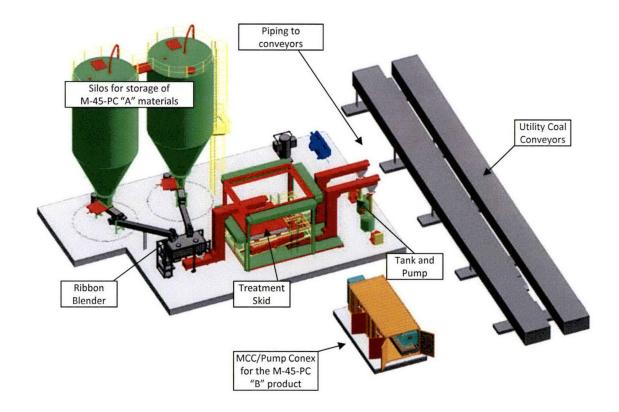
Refined Coal Process Flow Chart







Refined Coal Facility Schematic





Refined Coal Process Typical Application Point

The "B" liquid chemical is delivered here.



The "A" slurry chemical is delivered here.



Requested Accounting Treatment

- To ensure that customers receive the benefits of the transactions in the most timely manner, the Companies propose that the Commission approve the following accounting treatment:
 - Payments to Companies for Coal Yard Services directly credit fuel inventory (151) rather than fuel handling (501090)
 - Payment to Companies for Site Licensing directly credit fuel inventory (151) rather than Rent from Electric Property (454).
 - Coal severance taxes directly charge fuel inventory (151) rather than Property and Other Taxes (408).
- This accounting treatment will allow the benefits to be shared with retail customers via the monthly FAC filings.
- Absent approval of the proposed accounting treatment, the benefits received from the transaction would only flow through to customers in a future base rate case filing in which the test year included net benefits.



Coal Severance Tax and Other Expenses

- LG&E/KU have filed for a ruling from the Kentucky Department of Revenue regarding whether there is a tax liability.
- LG&E/KU will only include tax costs in the FAC each month to the extent they are
 offset by the benefit to be included in the FAC that same month.
- To the extent there are other costs, these will be recorded to their normal accounts rather than fuel inventory.
- LG&E/KU anticipate that on an annual basis the benefits of the arrangements with CCS/Tax Equity Investors will greatly exceed any costs.



Regulatory Approval Process

- Kentucky Public Service Commission
 - Filed application on August 19, 2015
- Federal Energy Regulatory Commission
 - Met with FERC staff on July 29, 2015
 - Filed application on August 14, 2015
 - Requested a ruling by October 13, 2015
- Virginia State Corporation Commission
 - Contacted staff on August 26, 2015 to request a conference and provide a project description.



Project Timeline

- August-September Filed for FERC, KPSC & VaSCC Regulatory approvals
- Mid August Filed for permits (All permits have been approved)
- August/September Complete detailed engineering
- October (anticipated) Regulatory approvals
- October-January 2016 Construct Refined Coal Facilities
- First quarter 2016 Facilities operational
- 2016 Negotiate new agreements with Tax Equity Investors



Questions?



Katen, Molly B

From:

Kurt Boehm < KBoehm@bkllawfirm.com>

Sent:

Friday, September 04, 2015 12:18 PM

To:

'Riggs, Kendrick R.'; Nguyen, Quang D (PSC)

Cc:

Michael Kurtz

Subject:

KPSC No. 2015-00264

Quang and Kendrick- KIUC will not have discovery questions in this case.

Thanks,

Kurt J. Boehm, Esq. BOEHM, KURTZ & LOWRY 36 East Seventh Street, Suite 1510 Cincinnati, Ohio 45202

office: 513-421-2255 mobile: 513-290-6683 fax: 513-421-2764 *Honorable Kurt J Boehm Attorney at Law Boehm, Kurtz & Lowry 36 East Seventh Street Suite 1510 Cincinnati, OHIO 45202

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*Honorable Allyson K Sturgeon Senior Corporate Attorney LG&E and KU Energy LLC 220 West Main Street Louisville, KENTUCKY 40202