

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN EXAMINATION OF THE APPLICATION OF )  
THE FUEL ADJUSTMENT CLAUSE OF ) CASE NO. 2014-00225  
KENTUCKY POWER COMPANY FROM )  
NOVEMBER 1, 2013 THROUGH APRIL 30, 2014 )

NOTICE OF FILING

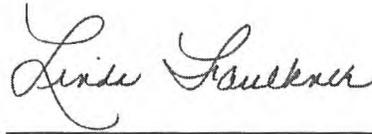
Notice is given to all parties that the following materials have been filed into the record of this proceeding:

- The digital video recording of the evidentiary hearing conducted on November 12, 2014 in this proceeding;
- Certification of the accuracy and correctness of the digital video recording;
- All exhibits introduced at the evidentiary hearing conducted on November 12, 2014 in this proceeding;
- A written log listing, *inter alia*, the date and time of where each witness' testimony begins and ends on the digital video recording of the evidentiary hearing conducted on November 12, 2014.

A copy of this Notice, the certification of the digital video record, hearing log, and exhibits have been electronically served upon all persons listed at the end of this Notice. Parties desiring an electronic copy of the digital video recording of the hearing in Windows Media format may download a copy at: [http://psc.ky.gov/av\\_broadcast/2014-00225/2014-00225\\_12Nov14\\_Inter.asx](http://psc.ky.gov/av_broadcast/2014-00225/2014-00225_12Nov14_Inter.asx). Parties wishing an annotated digital video

recording may submit a written request by electronic mail to [pscfilings@ky.gov](mailto:pscfilings@ky.gov). A minimal fee will be assessed for a copy of this recording.

Done at Frankfort, Kentucky, this 20<sup>th</sup> day of November 2014.

A handwritten signature in cursive script that reads "Linda Faulkner".

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Linda Faulkner  
Director, Filings Division  
Public Service Commission of Kentucky

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COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN EXAMINATION OF THE APPLICATION OF THE )  
FUEL ADJUSTMENT CLAUSE OF KENTUCKY POWER ) CASE NO. 2014-00225  
COMPANY FROM NOVEMBER 1, 2013 THROUGH )  
APRIL 30, 2014 )

CERTIFICATE

I, Sonya Harward, hereby certify that:

1. The attached DVD contains a digital recording of the Hearing conducted in the above-styled proceeding on November 12, 2014. Hearing Log, Exhibits, Exhibit List, and Witness List are included with the recording on November 12, 2014.

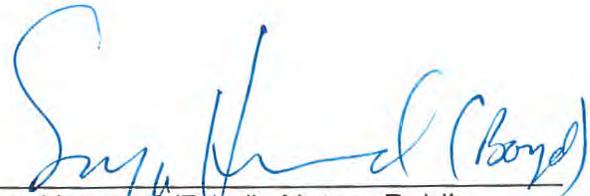
2. I am responsible for the preparation of the digital recording.

3. The digital recording accurately and correctly depicts the Hearing of November 12, 2014.

4. The "Exhibit List" attached to this Certificate correctly lists all Exhibits introduced at the Hearing of November 12, 2014.

5. The "Hearing Log" attached to this Certificate accurately and correctly states the events that occurred at the Hearing of November 12, 2014 and the time at which each occurred.

Given this 19<sup>th</sup> day of November, 2014.



Sonya Harward (Boyd), Notary Public  
State at Large

My commission expires: August 27, 2017



# Session Report - Detail

2014-00225\_12NOV2014

Kentucky Power Company

Date:	Type:	Location:	Department:
11/12/2014	Fuel Adjustment Clause	Public Service Commission	Hearing Room 1 (HR 1)

Judge: David Armstrong; Linda Breathitt; Jim Gardner  
 Witness: William Allen - KY Power; Phillip Hayet - for AG/KIUC; Lane Kollen - for AG/KIUC; David Moyer - KY Power; Kelly Pearce - KY Power; John Rogness - KY Power; Aaron Sink - KY Power; Charles West - KY Power; Raine Wohnhas - KY Power  
 Clerk: Sonya Harward

Event Time	Log Event
2:39:20 PM	Session Started
2:39:22 PM	Session Paused
2:50:15 PM	Session Resumed
2:50:19 PM	Vice Chairman Gardner Preliminary Remarks Note: Harward, Sonya                      Chairman David Armstrong and Commissioner Linda Breathitt
2:50:33 PM	Camera Lock Deactivated
2:50:39 PM	Attys. Mark Overstreet and Kenneth Gish for KY Power
2:51:04 PM	Attys. Larry Cook, Jennifer Hans, and Greg Dutton for Ofc. of the Attorney General
2:51:14 PM	Attys. Mike Kurtz, Kurt Boehm, and Jody Cohn for KIUC
2:51:46 PM	Attys. Richard Raff, Jeb Pinney, Quang Nguyen and Staff Members Chris Whelan, Leah Faulkner, and Matthew Baer for the PSC
2:52:00 PM	Public Notice filed Nov. 5
2:52:09 PM	Outstanding Motions Note: Harward, Sonya                      There are some outstanding motions regarding confidential treatment and a request for a stenographer for this hearing. Motion granted for use of a stenographer.
2:53:00 PM	Public Comment Note: Harward, Sonya                      No comments.
2:53:25 PM	Introduction of Panel Witnesses for Kentucky Power Company Note: Harward, Sonya                      Charles West, John Rogness, David Moyer, Aaron Sink
2:53:58 PM	Witnesses Sworn in as a Panel
2:54:10 PM	Atty. Overstreet Direct Exam of Witnesses for KY Power Note: Harward, Sonya                      Accept testimonies as accurate with no changes.
2:55:22 PM	Atty. Pinney Cross Exam of KY Power
2:55:30 PM	Atty. Pinney to Witness West Note: Harward, Sonya                      Referencing response to Staff's 1st Request, Item 1, regarding spot purchases.
2:57:02 PM	Atty. Pinney to Witness West Note: Harward, Sonya                      Referencing response to Staff's 1st Request, Item 8, page 1 of 3, regarding Ohio Valley Resources Contract.
2:58:22 PM	Atty. Pinney to Witness West Note: Harward, Sonya                      Referencing response to Staff's 1st Request, Item 8, page 3 of 3, regarding 1st Southern Sales Coal Contract.
3:00:01 PM	Atty. Pinney to Witness West Note: Harward, Sonya                      Referencing response to Staff's 1st Request, Item 9, page 2 of 2, regarding KY Power having the second lowest fuel costs.
3:02:12 PM	POST HEARING DATA REQUEST per Atty. Pinney Note: Harward, Sonya                      Provide the updated table with missing utility found in response to Staff's 1st Request, Item 9, page 2 of 2.

3:02:29 PM	Atty. Pinney to Witness WEst Note: Harward, Sonya	Referencing response to Staff's 1st Request, Item 11.b., page 2 of 2, regarding totals of high- and low-sulfur coal.
3:03:16 PM	Atty. Pinnney to Witness West Note: Harward, Sonya	Referencing response to Staff's 1st Request, Item 11.c., regarding different target inventory days.
3:05:06 PM	Atty. Pinney to Witness Sink Note: Harward, Sonya	Referencing CN 2013-00430, regarding status and completion date for Big Sandy conversion.
3:05:45 PM	Atty. Pinney to Witness West Note: Harward, Sonya	Referencing response to Staff's 1st Request, Item 20, regarding use of rail for coal deliveries.
3:07:08 PM	Atty. Pinney to Witness West Note: Harward, Sonya	Referencing response to Staff's 1st Request, Item 20, Attachments 1 and 2, confidential information.
3:08:47 PM	Atty. Pinney to Witness Moyer Note: Harward, Sonya	Referencing response to Staff's 1st Request, Item 4, regarding capacity factor for Mitchell Station.
3:09:39 PM	Atty. Pinney to Witness Sink Note: Harward, Sonya	Referencing response to Staff's 1st Request, Item 7, page 1 of 4, regarding planned outage for Big Sandy Unit 1.
3:10:31 PM	Atty. Pinney to Witness Moyer Note: Harward, Sonya	Referencing response to Staff's 1st Request, Item 7, page 3 of 4, regarding outages for Mitchell Unit 1.
3:11:21 PM	Atty. Pinney to Witness Rogness Note: Harward, Sonya	Referencing response to Staff's 3rd Request, Item 1.c., regarding disallowance of a particular purchase power cost.
3:13:58 PM	Atty. Pinney to Witness Rogness Note: Harward, Sonya	Asking exactly when KY Power began using the peaking-unit method.
3:14:45 PM	Atty. Overstreet Re-Direct of KY Power	
3:14:54 PM	Atty. Overstreet to Witness West Note: Harward, Sonya	Asking Witness to identify which contracts are supplying coal to the Mitchell Station.
3:17:05 PM	Post Hearing Requests due in 7 days	
3:17:23 PM	Panel Witnesses are dismissed.	
3:17:39 PM	Vice Chairman Gardner - Statement Regarding CNs 2014-00231 thru 2014-00249 Note: Harward, Sonya	Asking if there is anyone present regarding the EKPC and Big Rivers Cooperatives. [No one present.] The hearings in these cases were canceled.
3:18:07 PM	Witness Raine Wohnhas - KY Power - takes the stand and is sworn in. Note: Harward, Sonya	Managing Director of Regulatory Finance for KY Power
3:18:44 PM	Atty. Overstreet to Witness Wohnhas Note: Harward, Sonya	Accepts testimony with no changes.
3:19:10 PM	Atty. Kurtz to Witness Wohnhas Note: Harward, Sonya	Going over some background information.
3:21:46 PM	Atty. Kurtz to Witness Wohnhas Note: Harward, Sonya	Going over how energy flowed under the old pool agreement.
3:23:34 PM	Atty. Kurtz to Witness Wohnhas Note: Harward, Sonya	Discussing KY Power taking 50 percent ownership of Mitchell 1 and 2 in January 2013.
3:25:35 PM	Atty. Kurtz to Witness Wohnhas Note: Harward, Sonya	Discussing fuel costs at Mitchell Station.
3:27:07 PM	Atty. Kurtz to Witness Wohnhas Note: Harward, Sonya	Referencing response to Staff's 3rd Request, Item 9, Attachment 1.

3:28:23 PM	<p>KIUC - Exhibit 1  Note: Harward, Sonya</p>	<p>Response to Commission Staff's Third Set of Data Requests, Item 9, 2 pages and an Attachment.</p>
3:29:42 PM	<p>KIUC - Exhibit 2  Note: Harward, Sonya</p>	<p>Attachment 1 to Response to Commission Staff's First Set of Data Requests, Item 29.</p>
3:30:53 PM	<p>Atty. Kurtz to Witness Wohnhas  Note: Harward, Sonya</p>	<p>Asking questions about KIUC - Exhibit 2.</p>
3:33:14 PM	<p>Atty. Kurtz to Witness Wohnhas  Note: Harward, Sonya</p>	<p>Asking about native load.</p>
3:34:28 PM	<p>Atty. Kurtz to Witness Wohnhas  Note: Harward, Sonya</p>	<p>Asking if KY Power dispatches Rockport.</p>
3:35:45 PM	<p>Atty. Kurtz to Witness Wohnhas  Note: Harward, Sonya</p>	<p>Asking about minimum segment costs of the 975 MW and what that means. [References response to Staff's 1st Request, Item 29.]</p>
3:38:24 PM	<p>Atty. Kurtz to Witness Wohnhas  Note: Harward, Sonya</p>	<p>Continuing to ask about the no-load state.</p>
3:40:50 PM	<p>Atty. Kurtz to Witness Wohnhas  Note: Harward, Sonya</p>	<p>Asking about calculations of the no-load cost.</p>
3:42:47 PM	<p>KIUC - Exhibit 3  Note: Harward, Sonya</p>	<p>Except from Hayet Direct Testimony, page 9.</p>
3:46:39 PM	<p>Atty. Kurtz to Witness Wohnhas  Note: Harward, Sonya</p>	<p>Asking about higher rates charged to customers versus lower rates charged to off-system sales.</p>
3:48:21 PM	<p>Atty. Kurtz to Witness Wohnhas  Note: Harward, Sonya</p>	<p>Asking about no-load cost being treated as a fixed cost.</p>
3:49:01 PM	<p>KIUC - Exhibit 4  Note: Harward, Sonya</p>	<p>Attachment 2 of Response to Commission Staff's First Set of Data Requests, Item 29.</p>
3:50:37 PM	<p>Atty. Kurtz to Witness Wohnhas  Note: Harward, Sonya</p>	<p>Referencing KIUC - Exhibit 2, regarding April 2014's native load generation.</p>
3:53:03 PM	<p>Atty. Kurtz to Witness Wohnhas  Note: Harward, Sonya</p>	<p>Asking about native load versus off-system.</p>
3:54:44 PM	<p>Atty. Kurtz to Witness Wohnhas  Note: Harward, Sonya</p>	<p>Asking about how the PSC treats fixed environmental costs for purposes of the environmental surcharge.</p>
3:58:22 PM	<p>Atty. Kurtz to Witness Wohnhas  Note: Harward, Sonya</p>	<p>Referencing Witness's Testimony, page 6. line 8.</p>
3:59:22 PM	<p>Witness Wohnhas  Note: Harward, Sonya</p>	<p>Referencing RKW-1.</p>
4:02:02 PM	<p>Atty. Kurtz to Witness Wohnhas  Note: Harward, Sonya</p>	<p>Asking about knowledge of KY Power or AEP employees regarding no-load cost at time of Mitchell agreement.</p>
4:02:57 PM	<p>KIUC - Exhibit 5  Note: Harward, Sonya</p>	<p>Response to Commission Staff's Third Set of Data Requests, Item 10.</p>
4:05:54 PM	<p>Atty. Kurtz to Witness Wohnhas  Note: Harward, Sonya</p>	<p>Asking why KY Power waited to disclose the no-load costs.</p>
4:06:42 PM	<p>KIUC - Exhibit 6  Note: Harward, Sonya</p>	<p>Response to Commission Staff's First Set of Data Requests, Item 29.</p>
4:08:11 PM	<p>KIUC - Exhibit 7  Note: Harward, Sonya</p>	<p>Kentucky Power - Termination of Pool and acquisition of 50% of the Mitchell Plant effects on the Fuel Adjustment Clause, June 26, 2014</p>

4:09:46 PM	Atty. Kurtz to Witness Wohnhas Note: Harward, Sonya	Referencing KIUC - Exhibit 7, page 22. Also discusses last page.
4:12:19 PM	Atty. Kurtz to Witness Wohnhas Note: Harward, Sonya	Referencing Witness's Testimony, page 6, line 16.
4:12:52 PM	Atty. Kurtz to Witness Wohnhas Note: Harward, Sonya	Referencing KIUC - Exhibit 4, regarding remarks about the no-load costs and polar vortex.
4:15:27 PM	Atty. Kurtz to Witness Wohnhas Note: Harward, Sonya	Referencing KIUC - Exhibit 1.
4:16:02 PM	KIUC - Exhibit 8 Note: Harward, Sonya	Response to Commission Staff's Fifth Set of Data Requests, Item 10, 2 pages and an attachment.
4:16:57 PM	Atty. Kurtz to Witness Wohnhas Note: Harward, Sonya	Referencing Attachment 1 of KIUC - Exhibit 8.
4:22:16 PM	KIUC - Exhibit 9 Note: Harward, Sonya	Allocation \$/MWh By Method, Jan-Apr 2014, from Hayet DirectTestimony, page 15.
4:24:40 PM	Atty. Kurtz to Witness Wohnhas Note: Harward, Sonya	Going over native load on KIUC - Exhibit 9.
4:27:05 PM	Atty. Kurtz to Witness Wohnhas Note: Harward, Sonya	Referencing Kollen Testimony, Exhibit 7, regarding profits made for off-system sales.
4:29:02 PM	Atty. Cook Cross Exam of Witness Wohnhas Note: Harward, Sonya	Commenting about AG not being a party to the Settlement and Stipulation in the 2012-00578 and the AG having that Stipulation on appeal.
4:29:35 PM	Atty. Raff Cross Exam of Witness Wohnhas Note: Harward, Sonya	Asking about Jan-Apr 2014 allocations to native load customers for any no-load fuel costs for Big Sandy Unit 2 for any hour that native load could have been met without power from Big Sandy 2.
4:31:03 PM	Atty. Raff to Witness Wohnhas Note: Harward, Sonya	Asking about Witness's response to Atty. Kurtz's question regarding fairness of fuel costs charged to native-load customers being 50 percent higher than fuel costs charged to off-system sales.
4:33:07 PM	Atty. Raff to Witness Wohnhas Note: Harward, Sonya	Asking about fairness native-load customers having to pay all of the no-load costs for Mitchell and Big Sandy if KY Power had been recovering 100 percent of the cost to Mitchell Units for Jan.-Apr. 2014.
4:35:17 PM	Atty. Raff to Witness Wohnhas Note: Harward, Sonya	Asking why native-load customers should be charged for no-load fuel costs for the hours when Big Sandy 2 is not needed for native load other than the fact that its how its been done for years.
4:39:44 PM	Atty. Raff to Witness Wohnhas Note: Harward, Sonya	Referencing Witness's Rebuttal Testimony, pages 7-8, beginning at bottom of page 7 - asking Witness to read.
4:41:03 PM	Atty. Raff to Witness Wohnhas Note: Harward, Sonya	Referencing response to Commission Staff's 3rd Request, Item 9, page 1, \$81.244M

4:42:03 PM	POST HEARING DATA REQUEST per Atty. Raff Note: Harward, Sonya	Provide a schedule, for each month of 2014 through the most current month that data is available, which shows by month the 60 percent portion of off-system sales margins customers would have recieved under the 60/40 split but for the settlement agreement and the fact that the company is retaining that 60 percent, showing seperately the bill credits that KY retail customers would have recieved under the environmental surcharge if the surcharge had not been reset to zero in the Mitchell Settlement Agreement, and the amount associated with the asset transfer rider that retail customers incurred.
4:44:13 PM	Atty. Raff to Witness Wohnhas Note: Harward, Sonya	Referencing Witness's Rebuttal Testimony, page 11, beginning at line 6 - asking Witness to read the paragraph.
4:46:10 PM	Atty. Raff to Witness Wohnhas Note: Harward, Sonya	Asking about the acceptability of the change to the off-system sharing mechanism outside of a base rate case.
4:47:06 PM	Atty. Raff to Witness Wohnhas Note: Harward, Sonya	Asking if Witness is aware of 807 KAR 5:056, the Commission's Fuel Adjustment Clause regulation.
4:49:09 PM	Atty. Raff to Witness Wohnhas Note: Harward, Sonya	Asking about base rate case to be filed.
4:53:24 PM	POST HEARING DATA REQUEST per Atty. Raff Note: Harward, Sonya	Witness's Rebuttal Testimony, page 13, table that shows return on equity - Provide the supporting calculations for the return on equity amounts shown for the years 2010-2014.
4:53:53 PM	Atty. Raff to Witness Wohnhas Note: Harward, Sonya	Referencing Witness's Rebuttal Testimony, page 17, line 12, regarding Big Rivers being ordered to pay interest on disallowed fuel costs in CN 1990-360.
4:56:40 PM	Atty. Raff to Witness Wohnhas Note: Harward, Sonya	Asking about KY Power closing books before a PSC decision and costs being reflected in 2015.
4:57:41 PM	Atty. Raff to Witness Wohnhas Note: Harward, Sonya	Referencing Witness's Rebuttal Testimony, page 6, beginning at line 19 - asks Witness to read.
4:59:49 PM	Break	
4:59:55 PM	Session Paused	
5:12:46 PM	Session Resumed	
5:12:47 PM	Atty. Raff to Witness Wohnhas Note: Harward, Sonya	KUIC - Exhibit 8, last page, regarding original calculation in CN 2012 -00578 of 5.33 percent increase; and KIUC - Exhibit 1, regarding the revised calculations of 12.81 percent increase.
5:14:56 PM	POST HEARING DATA REQUEST per Atty. Raff Note: Harward, Sonya	Provide the amount of no-load costs that were included in the original Exhibit that contained the 5.33 percent increase, and the amount of no-load costs included in the revised Exhibit containing the 12.81 percent.
5:16:07 PM	Commissioner Breathitt Cross Exam of Witness Wohnhas Note: Harward, Sonya	Asking about use of no-load calculations for last 30 years, and if this is the first time in Witness's tenure that this type of weather has caused such an issue.
5:19:46 PM	Vice Chairman Gardner Cross Exam of Witness Wohnhas	
5:20:20 PM	POST HEARING DATA REQUEST per Vice Chairman Gardner Note: Harward, Sonya	For KIUC - Exhibit 4, update this with current information.

5:20:32 PM	Vice Chairman Gardner to Witness Wohnhas Note: Harward, Sonya	Referencing Mitchell Case, CN 2012-00578, regarding the Stipulation.
5:22:53 PM	Vice Chairman Gardner to Witness Wohnhas Note: Harward, Sonya	Asking if Witness is saying it is fair because company was giving up a lot of revenue they were entitled to if not for the Stipulation.
5:23:56 PM	Vice Chairman Gardner to Witness Wohnhas Note: Harward, Sonya	Asking about Company knowing that there were going to be no-load costs at the time of the Stipulation.
5:26:02 PM	Vice Chairman Gardner to Witness Wohnhas Note: Harward, Sonya	Asking what the amount of off-system sales were that KY Power budgeted at the time (that the customers would be responsible for).
5:27:08 PM	Vice Chairman Gardner to Witness Wohnhas Note: Harward, Sonya	Asking when Witness first heard of no-load costs.
5:28:24 PM	Vice Chairman Gardner to Witness Wohnhas Note: Harward, Sonya	Asking about Witness knowing about no-load concept when KY Power agreed with the Stipulation.
5:30:16 PM	Commissioner Breathitt to Witness Wohnhas Note: Harward, Sonya	Asking about Witness becoming aware of no-load just last November and if it is just buried deep.
5:31:29 PM	Atty. Overstreet Re-Direct Exam of Witness Wohnhas Note: Harward, Sonya Note: Harward, Sonya	Asking who dispatches Big Sandy, Mitchell, and Rockport. Asking about 60/40 sharing mechanism of off-system sales margins.
5:35:42 PM	Atty. Overstreet to Witness Wohnhas Note: Harward, Sonya Note: Harward, Sonya	Asking what the customers get by paying the no-load costs. Asking about no-load costs that company has used for many years.
5:40:04 PM	Atty. Cook Re-Cross Exam of Witness Wohnhas Note: Harward, Sonya	Asking about those in Columbus that were aware of no-load costs, if those in Columbus work for the ServCo., and about KY Power's reliance on the expertise of ServCo.
5:43:03 PM	Atty. Cook to Witness Wohnhas Note: Harward, Sonya	Asking about purpose of filing the rate case that was withdrawn under the terms of the Settlement.
5:43:37 PM	Atty. Raff Re-Cross Exam Witness Wohnhas Note: Harward, Sonya	Asking about \$9.9M savings to customers by not having to buy power on the market.
5:44:29 PM	Atty. Raff to Witness Wohnhas Note: Harward, Sonya	Referencing response to Commission Staff's 1st Request, Item 29, Attachment 2, regarding no-load costs.
5:46:59 PM	Atty. Overstreet Re-Direct Exam of Witness Wohnhas Note: Harward, Sonya	Asking about under-recovery of fuel costs and recovering the interest on the under-recovery.
5:47:35 PM	Witness Wohnhas dismissed from the stand.	
5:47:41 PM	Witness Kelly Pearce - KY Power - Note: Harward, Sonya	takes the stand and is sworn in. AEP, Director of Contracts and Analysis
5:48:18 PM	Atty. Gish Direct Exam of Witness Pearce Note: Harward, Sonya	Accepts testimony with no changes.
5:48:41 PM	Atty. Kurtz Cross Exam of Witness Pearce Note: Harward, Sonya	Asking if Witness agrees that no-load costs are theoretical costs.
5:49:46 PM	KIUC - Exhibit 10 Note: Harward, Sonya	No-Load Definition: Educational Document - PJM
5:52:07 PM	Atty. Kurtz to Witness Pearce Note: Harward, Sonya	Asking if KY Power can sell electricity without incurring the no-load cost.

5:52:58 PM	Atty. Kurtz to Witness Pearce Note: Harward, Sonya	Referencing Witness's Testimony, pages 17-18.
5:54:28 PM	KIUC - Exhibit 11 Note: Harward, Sonya	Compiled results of the Fuel Adjustment Filings of KU and LG&E for Jan. - Apr. 2014
5:56:46 PM	Atty. Kurtz to Witness Pearce Note: Harward, Sonya	Asking questions about KIUC - Exhibit 11, regarding off-system sales fuel costs.
5:57:33 PM	Camera Lock Deactivated	
5:58:40 PM	Atty. Kurtz to Witness Pearce Note: Harward, Sonya	Asking about KY Power making a \$49M profit for off-system sales in 1st 4 months.
6:05:31 PM	Atty. Kurtz to Witness Pearce Note: Harward, Sonya	Asking about the need to run all 6 units if only serving native load in April 2014.
6:09:09 PM	Atty. Kurtz to Witness Pearce Note: Harward, Sonya	Asking about \$4.25M no-load cost to Big Sandy 2 in April [Referencing KUIC - Exhibit 4].
6:12:30 PM	Atty. Kurtz to Witness Pearce Note: Harward, Sonya	Asking about native load being less than the minimum of all of the power plants.
6:13:31 PM	Atty. Raff Cross Exam of Witness Pearce Note: Harward, Sonya	Asking about Witness Wohnhas not being aware of no-load costs until Nov. 2013.
6:15:05 PM	Atty. Raff to Witness Pearce Note: Harward, Sonya	Asking how Witness learned about no-load costs.
6:15:55 PM	Atty. Raff to Witness Pearce Note: Harward, Sonya	Asking why no-load costs have not come up very often.
6:19:00 PM	Atty. Raff to Witness Pearce Note: Harward, Sonya	Asking if Witness is suprised that Witness Wohnhas did not know of no-load costs.
6:20:52 PM	Atty. Raff to Witness Pearce Note: Harward, Sonya  Note: Harward, Sonya	Referencing response to Commission Staff's 1st Request, Item 29, Attachment 2, No-Load Costs. Asking about comparison of \$13M no-load costs versus the \$9.9M in fuel cost savings.
6:23:42 PM	Atty. Raff to Witness Pearce Note: Harward, Sonya	Referencing KIUC - Exhibits 1 and 8, regarding original Exhibit not including no-load costs for Mitchell, and why it does not.
6:26:37 PM	Atty. Raff to Witness Pearce Note: Harward, Sonya	Asking if Witness was aware of this Exhibit when presented in Mitchell Transfer case.
6:28:34 PM	Atty. Raff to Witness Pearce Note: Harward, Sonya	Referencing response to Commission Staff's 2nd Request, Item 4.c., Attachment 3, regarding other incremental costs (in addition to no-load costs) being reflected in this attachment.
6:31:25 PM	POST HEARING DATA REQUEST per Atty. Raff Note: Harward, Sonya	Provide an update that reflects no-load costs and other incremental costs between no-load costs and unit minimums.
6:35:23 PM	Atty. Raff to Witness Pearce Note: Harward, Sonya	Asking if there are many hours when all of KY Power's units are not needed to meet its load.
6:40:00 PM	Atty. Raff to Witness Pearce Note: Harward, Sonya	Asking if cost allocation has to follow the dispatch.

6:41:21 PM	Atty. Raff to Witness Pearce Note: Harward, Sonya	Referencing response to Commission Staff's 1st Request, Item 29, page 4 of 4, paragraph E.
6:42:22 PM	Vice Chairman Gardner Cross Exam of Witness Pearce Note: Harward, Sonya	Asking if Witness provided any testimony or reviewed any responses to data requests in Mitchell case.
6:43:17 PM	Vice Chairman Gardner to Witness Pearce Note: Harward, Sonya	Asking if Witness saw KIUC - Exhibit 8 before it was presented in the Mitchell case and if he would have noticed that it did not include no-load costs.
6:44:38 PM	Vice Chairman Gardner to Witness Pearce Note: Harward, Sonya	Asking if Witness believes that KIUC - Exhibit 8 is incomplete and should the Commission not have relied on it because it does not have all of the information.
6:47:30 PM	Vice Chairman Gardner to Witness Pearce Note: Harward, Sonya	Asking about Witness's Testimony regarding excess generation during this period, the requirement to run all the time, and the no-load costs that will be incurred.
6:49:06 PM	Vice Chairman Gardner to Witness Pearce Note: Harward, Sonya	Asking about the Settlement with additional units being added, and the Witness knowing that from day 1 that there were going to be no-load costs.
6:50:01 PM	Vice Chairman Gardner to Witness Pearce Note: Harward, Sonya	Asking what the benefit is to ratepayers of the off-system sales component.
6:54:22 PM	Witness Pearce Note: Harward, Sonya	References the Settlement, paragraph 15.
6:55:07 PM	Atty. Gish Re-Direct Exam of Witness Pearce Note: Harward, Sonya	Asking about \$9.9 million net savings to customers and thus a \$23 million avoided market costs.
6:56:15 PM	Atty. Gish to Witness Pearce Note: Harward, Sonya	If company has all 6 units, and all 6 units are picked up by PJM, that means that the costs of running those units are less than the market cost.
6:57:24 PM	Atty. Gish to Witness Pearce Note: Harward, Sonya	Asking about methodology that LG&E/KU use and it being about the same as that used by KY Power.
6:58:48 PM	Atty. Kurtz Re-Cross Exam of Witness Pearce Note: Harward, Sonya	Referring to the KIUC fuel-cost allocation method, and it being the same as that used by EKPC and Duke.
7:03:16 PM	Atty. Kurtz to Witness Pearce Note: Harward, Sonya	Referencing Witness's Exhibit 5 and KIUC - Exhibit 2, regarding differences in amounts on these documents.
7:08:00 PM	Atty. Kurtz to Witness Pearce Note: Harward, Sonya	Asking about replacing Mitchell generation with market purchases.
7:13:55 PM	Atty. Raff Re-Cross Exam of Witness Pearce Note: Harward, Sonya	Asking about AEP having companies operating in various states, and about Witness's knowledge of the other states being aware of how no-load costs are allocated at 100 percent to native-load customers.
7:18:35 PM	Commissioner Breathitt Re-Cross Exam of Witness Pearce Note: Harward, Sonya	Asking about Witness's statement regarding LG&E/KU's "forced" costs onto off-system sales.
7:22:10 PM	Witness Pearce dismissed from the stand.	
7:22:21 PM	Break	
7:22:27 PM	Session Paused	

7:34:21 PM	Session Resumed	
7:34:25 PM	Camera Lock Deactivated	
7:34:26 PM	Witness William Allen - for KY Power - takes the stand and is sworn in.	
	Note: Harward, Sonya	AEP, Managing Director of Regulatory Base Management
7:34:52 PM	Atty. Gish Direct Exam of Witness Allen	
	Note: Harward, Sonya	Accepts testimony with no changes.
7:36:23 PM	Atty. Raff Cross Exam of Witness Allen	
	Note: Harward, Sonya	Asking how long Witness has known about no-load costs being allocated to native load customers at 100 percent.
7:37:23 PM	Atty. Raff to Witness Allen	
	Note: Harward, Sonya	Asking if Witness knows if no-load cost being allocated at 100 percent is a problem in other jurisdictions.
7:39:37 PM	Atty. Raff to Witness Allen	
	Note: Harward, Sonya	Asking if issue of allocating no-load costs has been raised in any other regulatory jurisdictions where AEP operates.
7:40:31 PM	Witness Allen	
	Note: Harward, Sonya	Witness reads from his Testimony.
7:43:10 PM	Atty. Raff to Witness Allen	
	Note: Harward, Sonya	Asking if allocating no-load costs at 100 percent has been an issue in any state-regulated proceeding.
7:46:02 PM	Vice Chairman Gardner Cross Exam of Witness Allen	
	Note: Harward, Sonya	Asking if the issue of no-load costs came up in the Mitchell case.
7:47:18 PM	Witness Allen	
	Note: Harward, Sonya	Addressing Vice Chairman Gardner's previous questions and referencing CN 2012-00578, response to Commission Staff's 5th Request, Item 10.
7:49:18 PM	Vice Chairman Gardner to Witness Allen	
	Note: Harward, Sonya	Asking if Witness had any discussions with Witness Wohnhas about no-load costs.
7:51:57 PM	Atty. Raff Re-Cross Exam of Witness Allen	
	Note: Harward, Sonya	Asking for clarification on response to Vice Chairman Gardner, regarding no-load costs and if those are reflected in this Exhibit.
7:54:41 PM	Vice Chairman Gardner - Interjects Question	
	Note: Harward, Sonya	Asking who calculated the net energy cost and gave that number to Witness Wohnhas.
7:56:02 PM	Atty. Raff to Witness Allen	
	Note: Harward, Sonya	Asking if the savings have been reflected in the bills of KY Power customers.
7:57:57 PM	POST HEARING DATA REQUESTS per Atty. Raff	
	Note: Harward, Sonya	Exhibit 5 by Witness Pearce, concerning the estimate for costs without Mitchell, provide the workpapers for how numbers were calculated for each of the 4 months.
7:59:06 PM	Witness Allen dismissed from the stand.	
7:59:18 PM	Witness Wohnhas re-takes the stand.	
7:59:32 PM	Vice Chairman Gardner Re-Cross Exam of Witness Wohnhas	
	Note: Harward, Sonya	Asking who told Witness about no-load costs and in what context did it come up.
8:01:01 PM	Vice Chairman Gardner to Witness Wohnhas	
	Note: Harward, Sonya	Asking the reason for Witness Pearce coming to KY Power to discuss no-load costs and what changes were being made.
8:03:10 PM	Vice Chairman Gardner to Witness Wohnhas	
	Note: Harward, Sonya	Asking if Witness understood significance of changes regarding no-load costs.

8:04:02 PM	Commissioner Breathitt Re-Cross Exam of Witness Wohnhas Note: Harward, Sonya	Comments that Witness did not know there was going to be polar vortex at the beginning of 2014.
8:04:51 PM	Commissioner Breathitt to Witness Wohnhas Note: Harward, Sonya	Asking if 300 MW minimum for Big Sandy 2 could be different and who determines it.
8:05:46 PM	Atty. Overstreet Re-Direct Exam of Witness Wohnhas Note: Harward, Sonya	Referencing response to KIUC's 2nd Request, Item 5.
8:07:03 PM	Chairman Armstrong to Witness Wohnhas Note: Harward, Sonya	Asking about response to KIUC's 2nd Request, Item 5, that was provided by Atty. Overstreet.
8:07:59 PM	Atty. Raff Re-Cross Exam of Witness Wohnhas Note: Harward, Sonya	Asking for clarification about why no-load costs were so high in January and February 2014.
8:12:06 PM	Atty. Overstreet Re-Direct Exam of Witness Wohnhas Note: Harward, Sonya	Asking if internal demand increased due to the cold weather.
8:13:33 PM	Witness Wohnhas dismissed from the stand.	
8:13:39 PM	Witness Phillip Hayet - KIUC/AG - takes the stand and is sworn in.	
	Note: Harward, Sonya	J. Kennedy and Associates, Inc., Director of Consulting
8:14:53 PM	Atty. Kurtz Direct Exam of Witness Hayet Note: Harward, Sonya	Three changes made to Witness's Testimony, found on pages 10, 11, and 12.
8:17:28 PM	Atty. Raff Cross Exam of Witness Hayet Note: Harward, Sonya	Referencing KIUC/AG's response to Commission Staff's 1st Request, Item 4.
8:22:29 PM	Atty. Raff to Witness Hayet Note: Harward, Sonya	Asking Witness to explain why his amount is less than the company's in response to Item 4.b.3.
8:24:15 PM	Vice Chairman Gardner Cross Exam of Witness Hayet Note: Harward, Sonya	Asking Witness to explain, from page 11 of his Testimony, how KY Power changed its FAC reconstruction process.
8:28:00 PM	Witness Hayet Note: Harward, Sonya	Has charts that may help his explanation.
8:28:22 PM	Atty. Overstreet - Objection Note: Harward, Sonya	If Witness wanted charts in his Testimony, he should have filed them.
8:31:33 PM	Atty. Kurtz Re-Direct Exam of Witness Hayet Note: Harward, Sonya	Asking Witness to explain about native-load customers getting zero megawatts but pay for no-load cost.
8:33:19 PM	Witness Hayet is dismissed from the stand.	
8:33:51 PM	Witness Lane Kollen - KIUC/AG - takes the stand and is sworn in.	
	Note: Harward, Sonya	Vice President and Principal for J. Kennedy and Associates
8:34:12 PM	Atty. Kurtz Direct Exam of Witness Kollen Note: Harward, Sonya	Accepts testimony with no changes.
8:35:00 PM	Commissioner Breathitt Cross Exam of Witness Kollen Note: Harward, Sonya	Asking Witness what he thinks precipitated AEP going to KY Power at the end of the year to discuss no-load costs.
8:36:31 PM	Commissioner Breathitt to Witness Kollen Note: Harward, Sonya	Asking if this is happening to other places or is it unique to Kentucky.
8:37:32 PM	Vice Chairman Gardner Cross Exam of Witness Kollen Note: Harward, Sonya	Asking what other costs, other than no-load costs, are included in minimum segments.
8:38:07 PM	Witness Kollen dismissed from the stand.	
8:38:38 PM	Briefs - Due Dec. 23	

8:39:20 PM Responses to Post Hearing Requests due in 2 weeks.  
8:39:46 PM Vice Chairman Gardner Closing Statements and Adjournment  
8:39:57 PM Session Paused  
9:44:42 AM Session Ended



## Exhibit List Report

2014-00225\_12NOV2014

Kentucky Power Company

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<b>Name:</b>	<b>Description:</b>
KIUC - Exhibit 1	Response to Commission Staff's Third Set of Data Requests, Item 9, 2 pages and an Attachment.
KIUC - Exhibit 10	No-Load Definition: Educational Document - PJM
KIUC - Exhibit 11	Compiled results of the Fuel Adjustment Filings of KU and LG&E for Jan. - Apr. 2014
KIUC - Exhibit 2	Attachment 1 to Response to Commission Staff's First Set of Data Requests, Item 29.
KIUC - Exhibit 3	Except from Hayet Direct Testimony, page 9.
KIUC - Exhibit 4	Attachment 2 of Response to Commission Staff's First Set of Data Requests, Item 29.
KIUC - Exhibit 5	Response to Commission Staff's Third Set of Data Requests, Item 10.
KIUC - Exhibit 6	Response to Commission Staff's First Set of Data Requests, Item 29.
KIUC - Exhibit 7	Kentucky Power - Termination of Pool and acquisition of 50% of the Mitchell Plant effects on the Fuel Adjustment Clause, June 26, 2014
KIUC - Exhibit 8	Response to Commission Staff's Fifth Set of Data Requests, Item 10, 2 pages and an attachment.
KIUC - Exhibit 9	Allocation \$/MWh By Method, Jan-Apr 2014, from Hayet DirectTestimony, page 15.

## Kentucky Power Company

### REQUEST

Refer to Item 10 of Kentucky Power's response to Commission Staff's Fifth Request for information in Case No. 2012-00578, Attachment 1, page 1 of 1.

- a. Confirm that this schedule demonstrates the percentage change in Kentucky jurisdictional revenue requirement comparing the following three different scenarios:
  - 1) the percentage change in the Kentucky jurisdictional revenue requirement associated with the installation of a Dry Flue Gas Desulfurization Scrubber at the Big Sandy Unit No. 2;
  - 2) the percentage change in the Kentucky jurisdictional revenue requirement associated with the Stipulation and Settlement Agreement of the Mitchell Transfer during the overlap period (January 2014 through June 2015); and
  - 3) the percentage change in jurisdictional revenue requirement associated with the Mitchell Transfer Post Big Sandy Unit retirement (July 2015 and forward). If this cannot be confirmed, explain what the schedule represents.
- b. In the Mitchell Transfer Overlap Period column, state which line number and the amount includes the Mitchell Units annual "no load costs."
- c. If the annual "no load costs" for Mitchell are not reflected in column 2, provide the impact the Mitchell "no load costs" would have on the percentage change amount of 5.33 percent shown on line 13, column 2.

### RESPONSE

- a. The Company confirms the three different scenarios described in the question.
- b. The no load costs for Mitchell were not included in column 2 (Mitchell Transfer Overlap Period) as the calculation was for the long-term, ongoing fuel savings for Mitchell as compared to Big Sandy as a result of their different fuel blends.

- c. Please see KPSC\_3\_9\_Attachment1 for an updated spreadsheet using the Company's response KPSC 5-10 in Case No. 2012-00578, Attachment 1.

The calculation of the Big Sandy Unit 2 and 50% of the Mitchell no-load costs vary based on the twelve-month period of the calculation.

The values for lines 2a (BS2 no load costs) and 3a (Mitchell 50% no load costs) are calculated using a twelve-month period ended March 31, 2013 to conform to the twelve-month period used for the jurisdictional revenue in the original response to KPSC 5-10 and the 2013 base rate case filing (Case No. 2013-00197).

WITNESS: Ranie K Wohnhas

**Kentucky Power Company  
 Rate Change Comparison  
 (\$000)**

Line No.	Description	DFGD Filing (1)	Jan 2014 - Jun 2015		July 2015 forward
			Mitchell Transfer Overlap Period (2)	Mitchell Transfer Post BSU2 Retirement (3)	
1	COS Impact	\$ 177,699 A.	\$ 44,000 F.	\$ 81,244 J.	
	Adjustments:				
2	Big Sandy Fuel Savings	\$ (18,211) B.	N/A	N/A	
2a	BSU2 No Load Costs	N/A	\$ -	\$ (32,967) Q.	
3	Mitchell Fuel Savings	N/A	\$ (16,750) G.	\$ (16,750)	
3a	Mitchell 50% No Load Costs	N/A	\$ 38,252 P.	\$ 38,252	
4	Pool Elimination (4)	\$ (21,304) C.	\$ -	\$ (21,304)	
5	Environmental Pool Adjustment	\$ (7,320) D.	\$ - H.	\$ (7,320)	
6	SS Tariff Adjustment	N/A	\$ - I.	N/A	
7	BSU2 Decommissioning Costs	N/A	N/A	\$ 7,948 K.	
8	BSU2 Amort. Of Undepr. Balance	N/A	N/A	\$ 21,056 L.	
9	BSU2 Study Costs	N/A	N/A	\$ 6,598 M.	
10	Total of Adjustments	\$ (46,835)	\$ 21,502	\$ (4,487)	
11	Adjusted COS Impact	\$ 130,864	\$ 65,502	\$ 76,757	
12	Case 2013-00197 Juris. Revenues	\$ 511,321 E.	\$ 511,321	\$ 511,321 N.	
13	Percent Change	25.59%	12.81%	15.01% N.	
14	Incremental 2015 Percent Change			1.95% O.	

Columns (2) and (3) are not additive.

- A. Exhibit LPM-2, Case No. 2011-00141
- B. Staff's Fourth Set of Data Requests in Case No. 2012-00578, Item No. 9, Attachment 1, Page 3 of 3.  
Average of two calendar 2013 values.
- C. Section V, Workpaper S-4, Page 4, Case No. 2013-00197
- D. Section V, Workpaper S-4, Page 62, Case No. 2013-00197
- E. Section V, Schedule 5 - Jurisdictional Operating Revenues, Case No. 2013-00197
- F. Memorandum of Understanding filed in Case No. 2012-00578, Paragraph 4
- G. Memorandum of Understanding filed in Case No. 2012-00578, Paragraph 2
- H. Memorandum of Understanding filed in Case No. 2012-00578, Paragraph 5
- I. Memorandum of Understanding filed in Case No. 2012-00578, Paragraph 7
- J. Includes removal of BSU2 O&M and Depreciation - see Attachment Page 2
- K. \$85.227 M collected over 25 years with carrying costs at WACC (8.08%)
- L. \$225.795 M collected over 25 years with carrying costs at WACC (8.08%)
- M. \$28,113,304 collected over 5 years with interest at long-term debt rate of 6.48%
- N. Revenues would be higher and % increase lower if MOU implemented 1/1/2014
- O. Does not reflect changes in other (Non-Mitchell) costs or revenues, if any, that may be part of future rate case.
- P. 12 ME 3/31/13, TY in Case 2013-00197
- Q. 12 ME 3/31/13, TY in Case 2013-00197

	Generation (MWh)				Fuel Cost (in \$1000)							
	November 2013	December 2013	January 2014	February 2014	March 2014	April 2014	November 2013	December 2013	January 2014	February 2014	March 2014	April 2014
<b>PLANT/UNIT TOTALS (Question: 29.h.(1))</b>												
Big Sandy 1	35,583	124,779	141,915	154,971	149,784	78,200						
Big Sandy 2	286	255,015	469,235	425,614	146,071	399,940						
Big Sandy Plant							2,075.97	13,224.76	19,054.15	17,147.65	9,283.76	14,450.19
Rockport 1 KP AEG	113,853	137,910	135,241	94,746	143,800	109,938	2,907.93	3,497.66	3,274.17	2,459.42	3,191.50	2,790.04
Rockport 2 KP AEG	126,399	135,072	128,673	95,240	138,629	90,024	3,204.09	3,396.93	3,080.78	2,539.07	3,081.68	2,352.53
Mitchell 1 KP			139,495	52,281	180,246	217,935			4,450.96	1,968.71	5,522.94	5,255.91
Mitchell 2 KP			219,595	249,044	250,451	150,979			6,403.18	7,335.77	6,347.64	4,294.64
<b>ALLOCATION TO OFF-SYSTEM (Question: 29.h.(5))</b>												
Big Sandy 1	5,467	45,784	58,702	79,303	49,943	42,678	174.96	2,872.68	1,697.45	2,353.30	1,517.60	1,264.62
Big Sandy 2	0	126,687	200,463	224,174	93,761	241,962	0.00	6,529.53	4,934.04	5,778.34	2,250.13	5,781.29
Big Sandy Plant												
Rockport 1 KP AEG	17,421	50,799	57,057	49,491	53,897	64,711	406.40	1,178.97	1,262.86	1,167.49	1,207.74	1,480.58
Rockport 2 KP AEG	18,332	43,615	49,753	38,437	45,385	50,853	425.94	1,004.96	1,090.06	895.53	997.26	1,150.85
Mitchell 1 KP			26,741	3,248	79,491	103,339			637.28	77.76	1,960.97	1,881.98
Mitchell 2 KP			48,331	34,638	74,136	67,373			1,149.15	866.17	1,738.60	1,207.18
<b>ALLOCATION TO NATIVE LOAD (Question: 29.h.(3))</b>												
Big Sandy 1	30,116	78,995	83,213	75,668	99,841	35,522						
Big Sandy 2	286	128,328	268,772	201,440	52,310	157,978						
Big Sandy Plant							1,901.01	3,822.55	12,422.66	9,016.01	5,516.03	7,404.28
Rockport 1 KP AEG	96,432	87,111	78,184	45,255	89,903	45,227	2,501.53	2,318.69	2,011.31	1,291.93	1,983.76	1,309.46
Rockport 2 KP AEG	108,068	91,457	78,920	56,804	93,244	39,171	2,778.15	2,391.97	1,990.72	1,643.53	2,084.42	1,201.68
Mitchell 1 KP	0	0	112,754	49,033	100,755	114,596	0.00	0.00	3,813.68	1,890.95	3,561.97	3,373.93
Mitchell 2 KP	0	0	171,204	214,406	176,315	83,606	0.00	0.00	5,254.03	6,469.60	4,609.04	3,087.46
<b>PERCENT MWh ALLOCATED TO NATIVE LOAD (Question: 29.h.(6))</b>												
Big Sandy 1	84.64%	63.31%	58.64%	48.83%	66.66%	45.42%						
Big Sandy 2	100.00%	50.32%	57.28%	47.33%	35.81%	39.50%						
Big Sandy Plant												
Rockport 1 KP AEG	84.70%	63.17%	57.81%	47.76%	62.52%	41.14%						
Rockport 2 KP AEG	85.50%	67.71%	61.33%	59.64%	67.26%	43.51%						
Mitchell 1 KP	0.00%	0.00%	80.83%	93.79%	55.90%	52.58%						
Mitchell 2 KP	0.00%	0.00%	77.98%	86.09%	70.40%	55.38%						

<b>Kentucky Power Fuel Generated Fuel Cost Allocation Native Load and Off-System Sales (\$/MWH)</b>				
	<b>Jan. 2014</b>	<b>Feb. 2014</b>	<b>Mar. 2014</b>	<b>Apr. 2014</b>
<b>Fuel Cost</b>	29.38	29.34	27.18	27.83
<b>Allocation to Off-System Sales</b>	24.42	25.95	24.39	22.36
<b>Allocation to Native Load</b>	32.14	31.61	28.99	34.40

Source: Kentucky Power Response to Staff 1-29, Attachment 1  
Hayet Direct Testimony at p. 9.

(i.e. lead cases from November 2012 through April 2014 for Kentucky Units (29 d & 29 h -7))

Periods	Big Sandy 1	Big Sandy 2	Mitchell 1 KP	Mitchell 2 KP	Rockport 1 KP AEG	Rockport 2 KP AEG	Grand Total
2012/11	0.010	0.000			192,970.562	266,952.658	459,923.230
2012/12	472,697.692	933,187.323			284,976.679	292,890.789	1,983,752.483
2013/01	480,312.173	3,345,690.500			301,204.928	311,715.001	4,438,922.603
2013/02	420,971.973	3,453,936.159			281,499.032	14,706.970	4,171,114.134
2013/03	520,102.982	5,198,100.614			312,367.103	0.000	6,030,570.699
2013/04	86,450.012	4,988,347.040			314,101.775	0.000	5,388,898.827
2013/05	61,970.029	519,039.954			334,150.241	102,251.519	1,017,411.742
2013/06	593,905.539	118,387.646			211,545.923	316,494.998	1,240,334.106
2013/07	640,957.696	114,293.626			381,620.196	397,208.135	1,534,079.653
2013/08	629,727.982	0.000			381,467.903	336,661.447	1,347,857.333
2013/09	576,437.181	0.000			343,950.122	336,297.147	1,256,684.451
2013/10	73,942.887	0.000			229,045.228	351,695.447	654,683.562
2013/11	165,016.741	42,523.961			327,021.996	324,896.494	859,459.193
2013/12	970,391.571	5,901,922.839			330,932.196	333,547.652	7,536,794.258
2014/01	448,955.898	4,700,457.677	1,730,564.379	2,006,349.462	314,973.515	310,999.875	9,512,300.806
2014/02	400,241.534	3,802,847.804	707,862.363	2,131,025.841	226,435.358	241,648.940	7,510,061.840
2014/03	499,222.214	1,535,995.926	1,706,322.712	2,227,440.182	409,244.657	403,847.803	6,782,073.495
2014/04	276,695.127	4,250,145.342	1,530,893.445	1,114,711.762	368,710.179	303,590.485	7,844,746.340
Total	7,317,999.241	38,904,876.412	5,675,642.899	7,479,527.248	5,546,217.593	4,645,405.362	69,569,668.754

## Kentucky Power Company

### REQUEST

Given that Kentucky Power allocates 100 percent of "no load costs" to native load customers, state whether Kentucky Power or American Electric Power Company employees were aware of the magnitude that the Mitchell "no load costs" would have on Kentucky Power's internal customers prior to the July 2, 2013 filing of the Stipulation and Settlement Agreement in Case No.2012-00578.<sup>4</sup>

### RESPONSE

No. Kentucky Power and AEPSC employees *were not* aware of the magnitude of the post-December 31, 2013 no load costs or their effect on the Company's internal customers. Because the Company did not intend to alter its allocation of no-load fuel costs following the transfer of the 50% undivided interest in the Mitchell generating station AEPSC and Kentucky Power employees did not consider such costs. Moreover, no load fuel costs are not explicitly identified in retail fuel cost projections.

The calculation of the \$16.75 million in annual fuel savings related to the fact that the Mitchell units were scrubbed and could use a mixture of high-sulfur and low-sulfur coal. An unscrubbed Big Sandy Unit 2 (to the extent it could continue to run) would be required to burn the more costly low-sulfur coal.

**WITNESS:** Ranie K Wohnhas

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<sup>4</sup> Case No. 2012-00578, Application of Kentucky Power Company for (1) a Certificate of Public Convenience and Necessity Authorizing the Transfer to the Company of an Undivided Fifty Percent Interest in the Mitchell Generating Assets; (2) Approval of the Assumption by Kentucky Power Company of Certain Liabilities in Connection with the Transfer of the Mitchell Generating Station; (3) Declaratory Ruling; (4) Deferral of Costs Incurred in Connection with the Company's Efforts to Meet Federal Clean Air Act and Related Requirements; and (5) All Other Required Approvals and Relief (Ky. PSC Oct. 7, 2013).

## Kentucky Power Company

### REQUEST

Provide Kentucky Power's definition of "no load costs".

- a. Explain in detail how these costs are calculated for each generating unit.
- b. Explain how the "no load costs" are allocated between native-load sales and off-system sales each hour.
- c. State the length of time "no load costs" have been allocated in this manner.
- d. By month and generating unit, provide the amount of "no load costs" that have been allocated to native-load customers from November 1, 2012, through April 30, 2014.
- e. If "no load costs" have been allocated 100 percent to native-load customers, state the amount, by month, that would have been allocated to native-load customers if "no load costs" had been considered with all other fuel costs and allocated according to economic dispatch.
- f. State whether any "no load costs" are being recovered through base rates. If yes, provide the amount by generating unit that was included in the test year in the utility's most recent adjudicated base rate case and state whether the costs are being double-recovered through the FAC.
- g. State whether "no load costs" are discussed in Kentucky Power's Cost Allocation Manual. If yes, provide excerpts of the manual wherein it is discussed.

- h. For each month under the review period and for each generating unit (Big Sandy units 1 and 2, Rockport units 1 and 2, and Mitchell units 1 and 2), provide the following:
- (1) The total MWh generated;
  - (2) The dollar amount of fuel costs allocated to native-load customers;
  - (3) The amount of MWh allocated to the native-load customers;
  - (4) The dollar amount of fuel costs allocated to off-system sales;
  - (5) The amount of MWh allocated to off-system sales;
  - (6) The percent of each unit's MWh allocated to native-load customers; and
  - (7) Each unit's "no load costs".
- i. During the years that the American Electric Power Interconnection Agreement was in place, provide the dates when changes were made in how fuel costs were allocated between native-load and off-system sales and describe the changes made.
- j. State whether Kentucky Power has discussed "no load costs" with the Commission prior to the meeting held on June 26, 2014, at the Commission's offices. If yes, identify the proceeding.

## RESPONSE

"No load costs" are the fixed fuel and consumable costs incurred when a unit is in operation that are not dependent on the output level of the unit. In other words, these are the costs incurred in any hour to ensure that a generating unit is online and available to serve internal load, which has long been a principle of how AEP dispatches its units.

- a. "No load costs" are calculated using second degree polynomial equations which are used to model the efficiency of a generating unit at various levels of output. These equations take the form:

$$\text{"REQUIRED HEAT INPUT} = A + B * \text{MWh} + C * \text{MWh}^2\text{"}$$

and model the heat input required to generate the specified "MWh" of generation. The equation coefficients are derived based on the design of the unit and are unique to each unit based on its configuration and operation.

"No load costs" are the fixed costs of fuel and consumables needed to supply the Required Heat Input in the formula above with the formula evaluated at zero MWh output (ie. the heat input specified by the A coefficient).

- b. "No load costs" are not associated with specific increments of generation, and thus have never been allocated to off-system sales and remain with native load costs. Economic dispatch allocates generation costs based on incremental changes associated with increasing or decreasing unit output. Because "no load costs" do not change when generation is increased or decreased, economic dispatch does not provide a basis for allocation of "no load costs".

This is a historical practice that dates back as far as the Company has been able to determine -- at least 30 years -- and nothing was found that suggested any other treatment prior to that period. Units were and are first and always available for internal load. Units that are on-line in a given hour are assumed first to satisfy internal load, and only the controllable dispatch between the unit minimums and maximums may be available to make off-system sales (OSS) if additional economic power is available and it is not needed for internal load.

As a result, dispatch between unit minimums and maximums for each hour was analyzed in the post-period cost reconstruction settlement process with the units of all AEP Interconnection Agreement members "pooled" together. In each hour, for the entire AEP East fleet (which in 2013 consisted of 22 plants or 59 units excluding renewable sources which are directly assigned to internal load), the unit with the very highest \$/MWh cost of the last MWh it dispatched, was the first MWh to be assigned to off-system sales (OSS) for that hour. The cost associated with that MWh is the cost as calculated using the heat input curve as described in response to subpart (a) above. For each hour, this OSS allocation continued, always selecting the next highest cost MWh, which is the cost of producing the last MWh (that has not already been assigned to OSS) from the highest cost unit, until costs were allocated to all OSS. The remaining MWhs and costs are what were used to serve the internal load of all of the members.

This treatment was further supported in Article 7.5. of the AEP Interconnection Agreement regarding settlement of power sales to foreign companies, "Electric Power and energy for such sales shall be considered to be supplied from the highest cost source carrying load on the System, *excluding sources operated for minimum operating requirements, or,,*" (emphasis added).

For this reason, AEP's consistent, historical practice of treating "no load costs" in this manner did not change in 2014. Only now, rather than all of the units of the AEP East fleet, the OSS are assigned using only KPCo's units.

Finally, this treatment is economically sound and mirrors the real time dispatch of units. For example, if the Company's fleet is on-line serving only its native load, the no-load cost are already being incurred. If the market then requests additional power at a \$30 /MWh price and a Company unit can dispatch another MWh at \$28/MWh, it is economic to do so.

The resulting real margin is \$2 (\$30 - \$28) and this \$2 can be shared in an equitable fashion between the Company's customers and shareholders -- in short, everyone benefits. If however, some artificial means is used to subsequently allocate \$3 of fixed no load fuel cost to the cost basis of this sale, increasing the cost basis to \$31 (\$28 + \$3), the resulting margin now becomes -\$1 (\$30 - \$31), which is a loss and signals that the sale was uneconomic. This is a distorted result and leads to the irrational incentive to serve only internal load and make no OSS even if the sale is truly economic.

- c. "No load costs" have been assigned to native load in this manner since at least 1984.
- d. Please see subpart (h)(7) below.
- e. Economic dispatch does not result in an allocation of "no-load costs." Please refer to subpart (b) above.
- f. There is no double-recovery. The fuel portion of "no load costs" is excluded from base rates and is recovered only through the fuel recovery mechanism of base fuel with the fuel adjustment clause. A portion of environmental consumable costs is also classified as "no load costs" and is recovered through base rates or the environmental surcharge.
- g. "No load costs" are not addressed within the Cost Allocation Manual.
- h. (1-6) Please Attachments 1 to this response. For Mitchell and Rockport plants, both total and allocated fuel costs are provided at the unit level. For Big Sandy, the total fuel costs are only available at the plant level.  
  
(7) Please see Attachment 2 to this response.
- i. AEP is not aware of any changes in the way that "no load costs" have been allocated since at least 1984. It has been AEP's consistent, historical method to allocate "no load costs" to internal load for at least 30 years and possibly longer.
- j. Kentucky Power is not aware of any proceeding in which inquiry has been made regarding "no load costs".

WITNESS: Ranie K. Wohnhas

# KENTUCKY POWER COMPANY

Termination of Pool and acquisition of 50% of the Mitchell Plant affect  
on the Fuel Adjustment Clause

June 26, 2014

# Mitchell Plant Operating Agreement

# Mitchell Plant Operating Agreement Excerpts

- ❑ 6.1(a) In any calendar month, the average unit cost of coal available for consumption from the Mitchell Plant common coal stock piles shall be determined based on the prior month's ending inventory dollar and ton balances plus current month receipts delivered to the Mitchell Plant common coal stock piles. Each Owner's average unit cost will be the same, and receipts and inventory available for consumption amounts will be allocated to each Owner based on the monthly usage.
  
- ❑ 6.1(b) The number of tons of coal consumed by the Mitchell Plant in each calendar month from the Mitchell Plant common coal stock piles shall be determined and shall be converted into a dollar amount equal to the product of 1) the average cost per ton of coal associated with the Mitchell Plant in the Mitchell Plant common stock pile at the close of such month, and 2) the number of tons of coal consumed by the Mitchell Plant from the Mitchell Plant common coal stock piles during such month. Such dollar amount shall be credited to the Mitchell Plant fuel in stock pile and charged to Mitchell Plant fuel consumed.
  
- ❑ 6.1(c) In each calendar month, Kentucky Power and AEP Generation Resources respective shares of the Mitchell Plant fuel consumed expenses as determined by the provisions of Section 6.1(b) shall be proportionate to each Owner's dispatch of the Mitchell Plant in such month.

# Operating Agreement in Practice

- Because Kentucky Power Company (KPCo) and American Electric Power Generation Resources (AEPGR) offer into the market and dispatch respective shares of the Mitchell plant independently, the amount of energy dispatched (Net Take) for each company in any given month will not be exactly equal to the 50% as the ownership share would reflect. Rather, the Net Take for each owner is calculated by dividing the total owner's take for the month by net generation for each unit. The March calculation is shown below.

<u>March 2014</u>	<u>Total</u>	<u>Mitchell 1</u>		<u>Total</u>	<u>Mitchell 2</u>	
		<u>KP</u>	<u>AEPGR</u>		<u>KP</u>	<u>AEPGR</u>
Net Generation (MWh)	360,323	180,246	180,077	499,061	250,678	248,383
% MTD Net Allocation	100.00%	50.023%	49.977%	100.00%	50.230%	49.770%

- Likewise, the monthly consumption of coal and oil may not be the same for AEPGR and KPCo, but the ending inventories and the cost per ton should equal. KPCo and AEPGR will incur the same monthly average unit cost for fuel.

# Sample Calculation of High Sulfur Coal Weighted Average Cost for March 2014

KENTUCKY POWER  
MITCHELL HIGH SULFUR - KPCCOAL INVENTORY LEDGER  
MARCH 2014

DESCRIPTION	TONS	TOTAL COST	COST PER TON
BEGINNING BALANCE	172,803.98	10,315,887.71	59.6970
FOB MINE	21,839.60	1,264,779.74	57.9122
FREIGHT		0.00	0.0000
TOTAL RECEIPTS	21,839.60	1,264,779.74	57.9122
TOTAL AVAILABLE	194,643.58	11,580,667.45	59.4968
CONSUMED UNIT 1 - 50.023%	40,741.23	2,423,972.95	59.4968
CONSUMED UNIT 2 - 50.230%	35,132.87	2,090,292.27	59.4968
COAL TRANSFERS TO OTHER PILES	0.00	0.00	0.0000
SURVEY ADJUST UNIT 1 - 50.023%	0.00	0.00	0.0000
SURVEY ADJUST UNIT 2 - 50.230%	0.00	0.00	0.0000
OTHER	0.00	0.00	0.0000
TOTAL CONSUMED	75,874.10	4,514,265.22	59.4968
ENDING BALANCE	118,769.48	7,066,402.23	59.4968

AEP GENERATION RESOURCES  
MITCHELL HIGH SULFUR - AEPGR COAL INVENTORY LEDGER  
MARCH 2014

DESCRIPTION	TONS	TOTAL COST	COST PER TON
BEGINNING BALANCE	172,803.98	10,315,887.71	59.6970
FOB MINE	21,480.40	1,243,408.09	57.8857
FREIGHT		0.00	0.0000
TOTAL RECEIPTS	21,480.40	1,243,408.09	57.8857
TOTAL AVAILABLE	194,284.38	11,559,295.80	59.4968
CONSUMED UNIT 1 - 49.977%	40,703.77	2,421,743.93	59.4968
CONSUMED UNIT 2 - 49.770%	34,811.13	2,071,149.64	59.4968
COAL TRANSFERS TO OTHER PILES	0.00	0.00	0.0000
SURVEY ADJUST UNIT 1 - 49.977%	0.00	0.00	0.0000
SURVEY ADJUST UNIT 2 - 49.770%	0.00	0.00	0.0000
OTHER	0.00	0.00	0.0000
TOTAL CONSUMED	75,514.90	4,492,893.57	59.4968
ENDING BALANCE	118,769.48	7,066,402.23	59.4968

Net Take

Weighted Avg. Cost Per Ton And Ending Inventories are Equal in accordance with Mitchell Plant Operating Agreement

## Coal Pile Inventory Adjustments

# Frequency of Coal Pile Inventories

- Coal Pile Surveys are typically done once or twice annually. In 2008, a Fuel Supply Task Group (FSTG) developed procedures for scheduling Coal Pile Inventories (CPI):
  - Large inventory plants have a Coal Pile Inventory (CPI) twice per year to avoid larger adjustments.
  - Plants that blend coal have two inventories per year to ensure that sufficient amounts of both types of coal are available.
  - Unless the book to physical inventory error is greater than +/- 2% in the most recent inventory, all other plants adhere to an annual inventory schedule.
  
- Coal Pile Inventories are conducted twice annually at Mitchell Plant, with the next survey anticipated to occur during the third quarter of 2014.

# Accounting for Coal Pile Survey Adjustments

- Previously, KPCo accounted for coal pile survey adjustments with a \$1 entry.
- A change was made to Kentucky Power's accounting for coal pile adjustments to properly match expenses to the proper period.
- The purpose of the survey adjustment is to properly adjust the books to the physical coal pile tons and to properly adjust previously recorded consumption.
- By valuing the survey tons at a +/- \$1, the necessary consumed correction is not being properly valued or reflected in the appropriate accounting period. The correction is merely being delayed into future periods.
- Per the Mitchell Operating Agreement, the weighted average cost per ton of coal that is used for consumption for each owner's share of the plant must be the same. If KPCo were booking the survey tons value at \$1, the weighted average cost would be skewed. To avoid a distortion of receipts within the month of the adjustment, both companies must use the same method for accounting for a coal pile survey adjustment.
- In the long-term, the impact to the FAC of a coal pile adjustment cost at \$1 or at the weighted average cost times the number of tons adjusted, would be the same.

# Illustration of Coal Pile Survey Adjustment Revised vs. Previous Methodology

BIG SANDY

Per Book: coal pile are 16,271 tons lower than results computed in Survey study/analysis.

REVISED METHODOLOGY				
KENTUCKY POWER BIG SANDY COAL INVENTORY LEDGER APRIL 2014				
DESCRIPTION	TONS	TOTAL COST	COST PER TON	BTU PER LB
BEGINNING BALANCE	304,510.32	22,311,754.31	72.7286	
FOB MINE	110,681.64	8,319,055.80	75.1620	
FREIGHT		0.00	0.0000	
TOTAL RECEIPTS	110,681.64	8,319,055.80	75.1620	
TOTAL AVAILABLE	496,651.32	36,390,104.85	73.2709	
CONSUMED		15,270,541.35	73.2709	
SURVEY ADJ	116,271.00	(1,192,190.81)	73.2709 (a)	
OTHER		0.00	0.0000	
TOTAL CONSUMED	192,141.00	14,078,350.54	73.2709	
ENDING BALANCE	304,510.32	22,311,754.31	73.2709	11,493

KENTUCKY POWER BIG SANDY COAL INVENTORY LEDGER MAY 2014				
DESCRIPTION	TONS	TOTAL COST	COST PER TON	BTU PER LB
BEGINNING BALANCE	304,510.92	22,311,754.31	73.2709	
FOB MINE	126,350.60	9,210,127.03	72.8934	
FREIGHT		0.00	0.0000	
TOTAL RECEIPTS	126,350.60	9,210,127.03	72.8934	
TOTAL AVAILABLE	430,860.92	31,521,881.34	73.1602	
CONSUMED	162,000.00	11,851,956.25	73.1602	
SURVEY ADJ		0.00	0.0000	
OTHER		0.00	0.0000	
TOTAL CONSUMED	162,000.00	11,851,956.25	73.1602	
ENDING BALANCE	268,860.92	19,669,925.09	73.1602	11,493

PREVIOUS METHODOLOGY				
KENTUCKY POWER BIG SANDY COAL INVENTORY LEDGER APRIL 2014				
DESCRIPTION	TONS	TOTAL COST	COST PER TON	BTU PER LB
BEGINNING BALANCE	385,969.68	28,071,044.90	72.7286	
FOB MINE	110,681.64	8,319,055.80	75.1620	
FREIGHT		0.00	0.0000	
TOTAL RECEIPTS	110,681.64	8,319,055.80	75.1620	
TOTAL AVAILABLE	496,651.32	36,390,104.85	73.2709	
CONSUMED		15,270,541.35	73.2709	
SURVEY ADJ	116,271.00	(1.00)	0.0001	
OTHER		0.00	0.0000	
TOTAL CONSUMED	192,141.00	15,270,540.35	79.4757	
ENDING BALANCE	304,510.32	21,119,564.50	69.3558	11,493

KENTUCKY POWER BIG SANDY COAL INVENTORY LEDGER MAY 2014				
DESCRIPTION	TONS	TOTAL COST	COST PER TON	BTU PER LB
BEGINNING BALANCE	304,510.92	21,119,564.50	69.3558	
FOB MINE	126,350.60	9,210,127.03	72.8934	
FREIGHT		0.00	0.0000	
TOTAL RECEIPTS	126,350.60	9,210,127.03	72.8934	
TOTAL AVAILABLE	430,860.92	30,329,691.53	70.3932	
CONSUMED	162,000.00	11,403,698.40	70.3932	
SURVEY ADJ		0.00	0.0000	
OTHER		0.00	0.0000	
TOTAL CONSUMED	162,000.00	11,403,698.40	70.3932	
ENDING BALANCE	268,860.92	18,925,993.13	70.3932	11,493

< Survey Adjustment \$ Valuation >

< Impacts on Ending WACI >

< Roll-forward of PM Ending WACI >

< Subsequent Month WACI >

< Subsequent Month Consumed >

(A) - (B) = \$448,257.85\*

(a) \$1,192,190.81 of immediate lower consumption expense in Survey Month under revised method

\* \$448,257.85 of delayed lower consumption expense in Survey Month +1 under previous method

# Specific Questions Regarding the Mitchell Coal Pile Adjustment

- When was the coal pile survey conducted that resulted in the adjustment?
  - The coal pile survey was conducted in the first quarter of 2014, for the period September 18, 2013 to February 5, 2014.
- When was the previous coal pile survey conducted for the Mitchell plant?
  - The previous coal pile survey was conducted in the third quarter of 2013, for the period February 6, 2013 to September 18, 2013.
- If it was conducted after 1/1/14, should the adjustment be prorated and only the amount relating to the period from 1/1/14 to the date of the survey be allocated to Kentucky Power?
  - The survey was conducted in the first quarter of 2014, and the adjustment was prorated from 1/1/14 to 2/5/14 using the following methodology:

<u>MITCHELL</u>	<u>KPCO</u>	<u>OPCO/AEPGR</u>	<u>TOTAL</u>
UNIT 1 NET GENERATION (MWh)	69,407.66	288,707.34	358,115.00
UNIT 2 NET GENERATION (MWh)	102,504.47	587,837.53	690,342.00
TOTAL PLANT	171,912.13	876,544.87	1,048,457.00
RATIO-UNIT 1	19.380%	80.620%	100.000%
RATIO-UNIT 2	14.850%	85.150%	100.000%
RATIO-TOTAL PLANT	16.397%	83.603%	100.000%

(a) Survey period 09/18/2013 - 02/05/2014 -- Prorated based on tons consumed over survey period

09/18/2013 thru 12/31/2013	> OPCO assigned 100%
01/01/2014 thru 02/05/2014	> AEPGR & KPCO assigned respective Net Take %'s for the period

# Calculation of Survey Adjustment

- Regarding the inventory adjustment of \$457,588.53 for Mitchell Plant during February, how was the unit cost of \$80.6564 per ton determined?
  - The table below illustrates the calculation:

	<u>Kentucky Power Share</u>		
	<u>Tons</u>	<u>Total Cost</u>	<u>Cost Per Ton</u>
		(\$)	(\$)
<b>SURVEY ADJUSTMENT-High Sulfur</b>			
UNIT 1	(34.88)	(2,082.47)	59.7038
UNIT 2	(51.97)	(3,102.75)	59.7027
SUBTOTAL	(86.85)	(5,185.22)	59.7032
<b>SURVEY ADJUSTMENT-Low Sulfur</b>			
UNIT 1	2,339.17	187,949.33	80.3487
UNIT 2	3,420.99	274,824.42	80.3348
SUBTOTAL	5,760.16	462,773.75	80.3404
<b>Total</b>	<b>5,673.31</b>	<b>\$457,588.53</b>	<b>\$80.6564</b>

# Specific Question Regarding the Mitchell Coal Inventory Schedule

- Refer to the January expense month, the Coal Inventory Schedule for Mitchell. The Subtotal Per Unit amount of \$70.6044 differs slightly from the Less Coal Burned Per Unit amount of \$70.5856. Should these Per Unit amounts be the same?

KENTUCKY POWER COMPANY  
MITCHELL PLANT - KPCO SHARE  
JANUARY 2014

COAL INVENTORY SCHEDULE

	<u>Tons</u>	<u>Amount</u>	<u>Per Unit</u>
Beginning Inventory	421,824.08	\$29,937,480.07	\$70.9715
Purchases	58,360.40	\$3,965,660.89	\$67.9512
Adjustments <sup>1</sup>	0.00	\$0.00	\$0.0000
Sub-Total	480,184.48	\$33,903,140.96	\$70.6044
Less Coal Burned <sup>2</sup>	145,211.50	\$10,249,835.84	\$70.5856
Ending Inventory	334,972.98	\$23,653,305.12	\$70.6126

# Specific Question Regarding the Mitchell Coal Inventory Schedule (continued)

KENTUCKY POWER COMPANY SHARE COAL INVENTORY SCHEDULE - HIGH SULFUR			
	<u>Tons</u>	<u>Amount</u>	<u>Per Unit</u>
Beginning Inventory	192,151.61	\$11,763,689.48	\$61.2209
Purchases	31,232.13	\$1,842,718.75	\$59.0007
Adjustments	1 0.00	\$0.00	\$0.0000
Sub-Total	223,383.76	\$13,606,408.23	\$60.9105
Less Coal Burned	2 67,703.83	\$4,123,871.26	\$60.9105

KENTUCKY POWER COMPANY SHARE COAL INVENTORY SCHEDULE - LOW SULFUR			
	<u>Tons</u>	<u>Amount</u>	<u>Per Unit</u>
Beginning Inventory	229,672.45	\$18,173,790.59	\$79.1292
Purchases	27,128.27	\$2,122,942.14	\$78.2557
Adjustments	1 0.00	\$0.00	\$0.0000
Sub-Total	256,800.72	\$20,296,732.73	\$79.0369
Less Coal Burned	2 77,507.67	\$6,125,964.58	\$79.0369

- Because these are summations of two independently calculated piles (high and low sulfur), these per unit amounts are not equal.
- Sub-total line is total per ton calculation of the combined weighted averages of the high & low sulfur piles.
- Less Coal Burned line is a total per ton calculation of each units' independent burn of both the high and low sulfur coal piles.
- For example, if in a given month Mitchell burned **NO** Low Sulfur (more expensive coal), but continued to buy both high and low sulfur coal that month at current average pile pricing, there would be limited fluctuation in the **Sub-total** line cost per ton as we continued to add to the pile at current pile prices, but the **Less Coal Burned** line cost per ton would be significantly lower because all that was burned was High Sulfur, which is carried at its lower price.

## FAC Considerations due to AEP East System Pool Termination

- Forced Outage Calculation
- Non-Economy Purchases

# Termination of AEP East System Pool

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- As of January 1, 2014, the AEP East System Pool was terminated.
- During 2013, approximately half of the energy used to serve KPCo internal load was from the Pool. It is important to note that Big Sandy Unit 2 experienced a prolonged forced outage from July through November 2013.
- Energy from the Pool was historically less expensive than generation available from Mitchell, Big Sandy, or the PJM Market, primarily due to the fact that the Cook nuclear plant was a member of the Pool.

# Forced Outage Calculation

- The consideration of price comparison during a forced outage has not previously been a major issue for Kentucky Power, as purchases from the AEP East System Pool, which were previously KPCo's source of power during a forced outage, were almost always less expensive than Big Sandy generation.
  
- However, with the termination of the AEP East System Pool, the replacement power from the market during a forced outage could exceed the unit's generation cost. An hourly comparison of generation and internal load is now performed in times of forced outages, excluding forced outages at Big Sandy Unit 2 in accordance with the terms of the Settlement Agreement in Case No. 2012-00578. If the hourly generation does not meet the internal load amount for a given hour, a comparison of the unit generation cost and the market cost will be performed. If the market rate was higher than the unit generation rate, the difference is removed from the FAC. During times of forced outages, the Company always uses the lower of the market rate or the unit generation cost in the FAC.
  
- For example, during January Mitchell Unit 1 experienced a forced outage. Using this methodology for the month of January, the cost of fuel associated with purchased power during this forced outage exceeded the KPCo unit generation (in this case Mitchell Unit 1) cost by a total of \$4,778.98.
  
- Please see sample calculation on next page.

VALUES ARE FOR ILLUSTRATIVE PURPOSES ONLY

STEP 1 & 3																	
DAY AND HOUR	(1)			(2)	(3)	(4)	(5)	(6)			(7)	(8)	(9)			(10)	(11)
	FORCED OUTAGE VOLUME FROM LASOR			TOTAL FORCED OUTAGE	NET AVAILABLE GENERATION RESOURCES	INTERNAL LOAD	PURCHASES DUE TO DEFICIENCY	MAX FO VOLUME REQUIRING REPLACEMENT POWER			AVERAGE PRICE OF PURCHASED POWER	TOTAL COST OF REPLACEMENT POWER DUE TO FO	FO UNIT FUEL COST FROM MONTHLY NET ENERGY REQUIREMENT REPORT			TOTAL ALLOWABLE FO REPLACEMENT COST	TOTAL FO REPLACEMENT COST EXCLUDED FROM FAC
	Mitchell 1	Mitchell 2	BS 1	Total	INPUT FROM POWER TRACKER	INPUT FROM POWER TRACKER	MAX [(4)-(3),0]	Mitchell 1	Mitchell 2	BS 1	INPUT FROM LASOR	(5) x (7)	Mitchell 1	Mitchell 2	BS1	(6x) X (9x)	(8) - (10)
HOUR 1	385	-	-	385	896	950	54.1	54.1	-	-	\$ 36.00	\$ 1,947.60	\$ 30,000	\$ 28,000	\$ 30,500	\$ 1,623.00	\$ 324.60
HOUR2	385	-	-	385	811	950	139.3	139.3	-	-	\$ 36.00	\$ 5,013.00	\$ 30,000	\$ 28,000	\$ 30,500	\$ 4,177.50	\$ 835.50
HOUR3	385	-	-	385	775	1,008	233.1	233.1	-	-	\$ 36.00	\$ 8,392.97	\$ 30,000	\$ 28,000	\$ 30,500	\$ 6,994.14	\$ 1,398.83
HOUR4	385	-	-	385	855	1,011	156.4	156.4	-	-	\$ 36.00	\$ 5,629.86	\$ 30,000	\$ 28,000	\$ 30,500	\$ 4,691.55	\$ 938.31
HOUR5	385	-	-	385	855	1,012	157.8	157.8	-	-	\$ 36.00	\$ 5,681.45	\$ 30,000	\$ 28,000	\$ 30,500	\$ 4,734.54	\$ 946.91
HOUR6	385	-	-	385	855	1,037	182.3	182.3	-	-	\$ 36.00	\$ 6,564.06	\$ 30,000	\$ 28,000	\$ 30,500	\$ 5,470.05	\$ 1,094.01
HOUR7	385	-	-	385	887	1,055	168.3	168.3	-	-	\$ 36.00	\$ 6,059.27	\$ 30,000	\$ 28,000	\$ 30,500	\$ 5,049.39	\$ 1,009.88
HOUR8	385	-	-	385	891	1,093	202.3	202.3	-	-	\$ 36.00	\$ 7,282.33	\$ 30,000	\$ 28,000	\$ 30,500	\$ 6,068.61	\$ 1,213.72
HOUR9	385	-	-	385	889	1,107	218.1	218.1	-	-	\$ 36.00	\$ 7,850.45	\$ 30,000	\$ 28,000	\$ 30,500	\$ 6,542.04	\$ 1,308.41
HOUR10	385	-	-	385	891	1,094	202.7	202.7	-	-	\$ 36.00	\$ 7,298.50	\$ 30,000	\$ 28,000	\$ 30,500	\$ 6,082.08	\$ 1,216.42
HOUR11	385	-	-	385	891	1,043	151.6	151.6	-	-	\$ 36.00	\$ 5,458.93	\$ 30,000	\$ 28,000	\$ 30,500	\$ 4,549.11	\$ 909.82
HOUR12	385	-	-	385	891	969	78.4	78.4	-	-	\$ 36.00	\$ 2,822.98	\$ 30,000	\$ 28,000	\$ 30,500	\$ 2,352.48	\$ 470.50
HOUR13	385	-	-	385	891	912	21.1	21.1	-	-	\$ 36.00	\$ 759.31	\$ 30,000	\$ 28,000	\$ 30,500	\$ 632.76	\$ 126.55
HOUR14	385	-	-	385	891	871	-	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
HOUR15	385	-	-	385	891	844	-	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
HOUR16	385	-	-	385	891	835	-	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
HOUR17	385	-	-	385	891	857	-	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
HOUR18	385	-	-	385	891	910	19.3	19.3	-	-	\$ 42.00	\$ 808.50	\$ 30,000	\$ 28,000	\$ 30,500	\$ 577.50	\$ 231.00
HOUR19	385	-	-	385	896	930	34.1	28.0	-	-	\$ 42.00	\$ 1,176.00	\$ 30,000	\$ 28,000	\$ 30,500	\$ 840.00	\$ 336.00
HOUR20	385	-	-	385	895	940	44.8	44.8	-	-	\$ 42.00	\$ 1,881.60	\$ 30,000	\$ 28,000	\$ 30,500	\$ 1,344.00	\$ 537.60
HOUR21	385	-	-	385	941	960	18.8	5.0	-	-	\$ 42.00	\$ 210.00	\$ 30,000	\$ 28,000	\$ 30,500	\$ 150.00	\$ 60.00
HOUR22	385	-	-	385	994	986	-	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
HOUR23	385	-	-	385	988	969	-	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
HOUR24	385	-	-	385	994	944	-	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
TOTAL																\$ 61,878.75	\$ 12,958.05
HOUR 1	385	-	-	385	1,784	1,264	-	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
HOUR 2	385	-	-	385	1,748	1,259	-	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
HOUR 3	385	-	-	385	1,684	1,277	-	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
HOUR 4	385	-	-	385	1,621	1,293	-	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
HOUR 5	385	397	-	782	1,449	1,339	-	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
HOUR 6	385	397	-	782	1,449	1,375	-	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
HOUR 7	385	397	-	782	1,450	1,416	-	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
HOUR 8	385	397	-	782	1,451	1,466	15.6	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
HOUR 9	385	397	-	782	1,447	1,477	29.4	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
HOUR 10	385	397	-	782	1,456	1,458	1.5	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
HOUR 11	385	397	-	782	1,457	1,391	-	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
HOUR 12	385	397	-	782	1,461	1,328	-	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
HOUR 13	385	397	-	782	1,468	1,285	-	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
HOUR 14	385	397	-	782	1,471	1,256	-	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
HOUR 15	385	397	-	782	1,471	1,234	-	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
HOUR 16	385	397	-	782	1,471	1,254	-	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
HOUR 17	385	397	-	782	1,470	1,276	-	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
HOUR 18	385	397	-	782	1,471	1,306	-	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
HOUR 19	385	397	-	782	1,469	1,329	-	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
HOUR 20	385	397	-	782	1,463	1,317	-	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
HOUR 21	385	397	-	782	1,452	1,297	-	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
HOUR 22	385	-	-	385	1,475	1,270	-	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
HOUR 23	385	-	-	385	1,481	1,248	-	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
HOUR 24	385	-	-	385	1,499	1,212	-	-	-	-	\$ -	\$ -	\$ 30,000	\$ 28,000	\$ 30,500	\$ -	\$ -
TOTAL																	\$ -

# Non-Economy Purchases

- ❑ Previously, Kentucky Power relied on the AEP East System Pool in times that its generation did not meet its load. Now, needed energy will be purchased from the market at the market rate. The market price for energy could be higher than Kentucky Power's generation costs whereas purchases made under the Pool Agreement were almost always at a lower cost than the Big Sandy generation costs.
- ❑ In accordance with Commission Order Dated February 7, 2005 in Case No. 2004-00430, Kentucky Power will flow the costs of non-economy purchases through the FAC unless the non-economy purchase occurs as a result of a forced outage. As prescribed in the Order:

*The regulation prescribes a strict procedure for accounting and reporting fuel costs and requires the reporting of all fuel costs. It does not allow any discretion to a utility to ignore or underreport such costs that are otherwise considered a "fuel cost" or to use other than actual costs. The regulation makes no exceptions and provides for no variations or deviations from the stated reporting methodology.*



## Other Issues

- Reflection of Rockport Purchases in Power Transaction Schedule
- Marginal Line Losses
- Allocation of Costs
- Recent Increase in FAC

# Rockport Purchases

## Current Practice

- Rockport purchases are included in purchases for the estimated fuel costs and in Kentucky Power's generation section of the actual fuel costs.

## Upcoming Changes

- A programming change has been made to include Rockport purchases in the purchases section of actual fuel costs of the Power Transaction Schedule. There will be no impact on the total fuel cost. This programming change will be finalized for the May expense month.

# System Line Losses

## Distribution

- The distribution losses that are included in the FAC are calculated based on the average 12-month line loss times the retail kWh sales for the month less any Company usage. Therefore, there is no allocation between native load and off-system sales.

## Transmission

- Each monthly PJM statement includes a line for charges and a line for credits for marginal line losses.
- The allocation between off-system sales and internal load is based on resource utilization.
- Marginal line losses allocated to internal load and booked in accounts 4470207 and 4470208 are included in the FAC as authorized by the Kentucky Public Service Commission in Case No. 2007-00522.

# Allocation of Costs

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- KPCo has continued to utilize a dispatch simulation to determine the assignment of fuel costs to off-system sales and internal load.
- KPCo's methodology for allocating no-load costs to internal load has not changed.

# Increase in Fuel Adjustment Clause

- Contributing Factors:
  - ▢ Termination of the AEP East System Pool.
  - ▢ Inclusion of Mitchell in KPC's portfolio.

## Kentucky Power Company

### REQUEST

Provide an exhibit, with an electronic copy with all formulas intact and unprotected and with all columns and rows accessible, using the same Kentucky Jurisdiction 12-month revenues in all three columns. The schedule should reflect all known and measurable adjustments, and at a minimum should reflect the following:

- a. On an annual basis, Column 1 should be similar to Exhibit LPM-1 to the Direct Testimony of Lila P. Muncy filed in Case No. 2011-00401, except it should be allocated according to base rate methodology and not the Environmental Surcharge Report percent of revenue methodology. It should include any effects for known and measurable adjustments now known, such as reduction in fuel costs, any reduction in environmental costs due to the January 1, 2014 termination of the AEP Pool and any effects of amortization of scrubber study costs;<sup>1</sup>
- b. On an annual basis, Column 2 should be similar to RKW-Exhibit 4 filed in this proceeding, considering Kentucky Power's proposed assumption of 50 percent of the Mitchell Units 1 & 2 during the approximately 17 months ending May 31, 2015 when both Big Sandy Unit No. 2 and the Mitchell Units will both be operating. Column 2 should also include the effects for any known and measurable adjustments now known, such as reduction in fuel costs, any reduction in environmental costs due to the January 1, 2014 termination of the AEP Pool and any effects of amortization of scrubber study costs;
- c. On an annual basis, Column 3 should be similar to RKW-Exhibit 4 filed in this proceeding, considering Kentucky Power's proposed assumption of 50 percent Mitchell Units 1 & 2, beginning June 1, 2015 when Big Sandy Unit 2 is scheduled to be retired. This column should show the effects of removing the additional system sales because Big Sandy Unit 2 is no longer available to be dispatched, as well as the removal of any costs (O&M, taxes and depreciation) associated with Big Sandy Unit 2 due to its retirement; the effects of any Big Sandy Unit 2 decommissioning costs; the effects of the amortization of the Big Sandy Unit 2 un-depreciated balance at the time of the decommissioning; and the effects of any other associated costs proposed to be amortized. Each of the items should be a separate line item on the schedule with a full explanation for including the item along with the method of calculating the amount.

**RESPONSE**

Please see KPSC 5-10 Attachment 1 for the requested estimated calculations.

**WITNESS:** Ranie K Wohnhas

**Kentucky Power Company**  
**Rate Change Comparison**  
**(\$000)**

Line No.	Description	DFGD Filing (1)	Jan 2014 - Jun 2015		July 2015 forward	
			Mitchell Transfer Overlap Period (2)	Mitchell Transfer Post BSU2 Retirement (3)		
1	COS Impact	\$ 177,699 A.	\$ 44,000 F.	\$ 81,244 J.		
	Adjustments:					
2	Big Sandy Fuel Savings	\$ (18,211) B.	N/A	N/A		
3	Mitchell Fuel Savings	N/A	\$ (16,750) G.	\$ (16,750)		
4	Pool Elimination (4)	\$ (21,304) C.	\$ -	\$ (21,304)		
5	Environmental Pool Adjustment	\$ (7,320) D.	\$ - H.	\$ (7,320)		
6	SS Tariff Adjustment	N/A	\$ - I.	N/A		
7	BSU2 Decommissioning Costs	N/A	N/A	\$ 7,948 K.		
8	BSU2 Amort. Of Undepr. Balance	N/A	N/A	\$ 21,056 L.		
9	BSU2 Study Costs	N/A	N/A	\$ 6,598 M.		
10	Total of Adjustments	\$ (46,835)	\$ (16,750)	\$ (9,772)		
11	Adjusted COS Impact	\$ 130,864	\$ 27,250	\$ 71,472		
12	Case 2013-00197 Juris. Revenues	\$ 511,321 E.	\$ 511,321	\$ 511,321 N.		
13	Percent Change	25.59%	5.33%	13.98% O.		
14	Incremental 2015 Percent Change			8.21%		

Columns (2) and (3) are not additive.

A. Exhibit LPM-2, Case No. 2011-00141

B. Staff's Fourth Set of Data Requests in Case No. 2012-00578, Item No. 9, Attachment 1, Page 3 of 3.  
Average of two calendar 2013 values.

C. Section V, Workpaper S-4, Page 4, Case No. 2013-00197

D. Section V, Workpaper S-4, Page 62, Case No. 2013-00197

E. Section V, Schedule 5 Jurisdictional Operating Revenues, Case No. 2013-00197

F. Memorandum of Understanding filed in Case No. 2012-00578, Paragraph 4

G. Memorandum of Understanding filed in Case No. 2012-00578, Paragraph 2

H. Memorandum of Understanding filed in Case No. 2012-00578, Paragraph 5

I. Memorandum of Understanding filed in Case No. 2012-00578, Paragraph 7

J. Includes removal of BSU2 O&M and Depreciation - see Attachment Page 2

K. \$85.227 M collected over 25 years with carrying costs at WACC (8.08%)

L. \$225.795 M collected over 25 years with carrying costs at WACC (8.08%)

M. \$28,113,304 collected over 5 years with interest at long-term debt rate of 6.48%

N. Revenues would be higher and % increase lower if MOU implemented 1/1/2014

O. Does not reflect changes in other (Non-Mitchell) costs or revenues, if any, that may be part of future rate case.

**ALLOCATION \$/MWh BY METHOD**  
**Jan - Apr 2014**

		Big Sandy	Mitchell	Rockport
<b>KPCO</b>	OSS	25.81	21.77	22.59
	NL	35.25	31.35	25.66
	Range	9.44	9.58	3.07
<b>EKPC</b>	OSS	31.38	30.59	25.53
	NL	30.42	26.53	24.50
	Range	0.97	4.06	1.04

Source: Hayet Direct Testimony at p. 15



## No-Load Definition: Educational Document

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### No-Load: Past and Present

PJM began as a power pool where generating companies agreed to centralized dispatch of their generation. PJM originally dispatched the pool using incremental cost curves developed from incremental heat rate curves and fuel cost supplied by the members. Since 1997, PJM has used incremental cost/price offers supplied by the members to dispatch the system. No-load is a portion of the cost offer that PJM uses in its calculation to determine which resources should be dispatched. (See Appendix 2)

PJM uses this information to place generation in and out of service and achieve the lowest possible overall cost for the system. No-load is one of the inputs PJM needs to minimize production costs.

The book Fundamentals of Power System Economics defines no-load cost as the theoretical cost for a unit "... to remain connected to the system while supplying non electrical power, the no-load cost represents the cost of fuel required to keep the unit running. Such a mode of operation is not possible for most thermal generating units. The no-load cost is simply the constant term in the cost curve and does not have physical meaning."<sup>1</sup> (See Appendix 1)

### References to PJM Documents

**Manual 15: Cost Development Guidelines** (Manual 15) discusses no-load cost as a component of the cost based offer.<sup>2</sup> Manual 15 defines no-load as the "calculated cost per hour to run at zero net output". Manual 15 also provides the following guidance on how to calculate the no-load cost:

*"Since generating units cannot normally be run stable at zero net output, the heat input may be determined by extrapolating the total heat input-output curve to zero net output. Therefore, No-load fuel consumed shall be the theoretical value of fuel consumed at zero net output from test data or through extrapolation of the theoretical input-output curve. All PJM Members shall use no-load fuel consumed to develop no-load costs for their units. No-load fuel value shall be the value used to develop no-load costs. The fuel associated with unit no-load may be a theoretical value extrapolated from other unit operating data, or may be the result of a specific test performed to document the no-load fuel consumed. Sufficient documentation for each generating unit's no-load point in MBTUs (or fuel) per hour shall consist of a single contact person and/or document to serve as a consistent basis for scheduling, operating and accounting applications."<sup>3</sup>*



## No-Load Definition: Educational Document

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Manual 15 also adds that “no load costs are not included in incremental costs... this cost is a dollar per hour (\$/hour) rate.”<sup>4</sup> And no-load is referenced in the discussion regarding performance factor calculation<sup>5</sup>. Manual 15 only addresses two unit types specific to their no-load. Combustion Turbine no-load fuel is defined as “the theoretical or actual fuel burn rate expressed in MBTU/Hr at the point of electric bus synchronization.”<sup>6</sup> Furthermore the CT Maintenance Adder “is included directly in...no-load...”<sup>7</sup> The only other reference to unit specific no-load costs or fuel is for Hydro Units; simply stating that they “...do not have no-load costs.”<sup>8</sup> Manual 15 is not explicit on how the no-load cost should be calculated for a combined cycle.

No-load costs are also referenced in the eMKT User's guide. “No-load cost (or price) is the hourly fixed cost (or price), expressed in \$/hr, to run the generating unit at zero net output. It can include hourly no-load costs and other fixed costs.” It also talks about using cost-based no-load and price based no-load and the enrollment period twice a year.

The Open Access Transmission Tariff mentions no-load:

- 1 Black Start Resources will be paid for testing (including their no-load costs)<sup>9</sup>
2. Generators can choose price or cost no-load and startup costs on a 6 month basis.<sup>10</sup>
3. All capacity resources shall submit a “binding offer for energy, along with startup and no load fees”.<sup>11</sup>
4. Pool scheduled resources that are selected or selected and cancelled will be paid no-load costs<sup>12</sup>
5. Self scheduled units do not get no-load fees.<sup>13</sup>
6. Units get BOR to cover no-load fees when scheduled back within PJM or into the PJM region by the Transmission Provider.<sup>14</sup>
7. Operating Reserves will pay no-load costs if LMP does not.<sup>15</sup>
8. Reactive reliability will be compensated for no-load cost.<sup>16</sup>
9. If the offer price plus startup or no-load fees cannot exceed \$1000/MWh<sup>17</sup>

Within PJM's training course PJM Generation 201, No-load Cost is defined as the “Cost per hour to maintain the boiler operating and the turbine and generator spinning at synchronous speed, but not generating any output. This is a dollars per hours (\$/hr) cost.”<sup>18</sup>

### Other RTO practices regarding no-load



## No-Load Definition: Educational Document

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New York Independent System Operator (NYISO) Manual 11 Defines the operating bid as the "piecewise linear monotonically increasing cost curve. These bids are comprised of up to 20 segments. The first segment is defined by the no-load cost axis intercept (\$/hr) and a slope (\$/MWh). The next segments are defined by MW break point and slope (\$/MWh) pairs. Different curves can be input for different schedule days.<sup>19</sup>

Midwest Independent System Operator (MISO): "No Load – Costs for operating a Generation Resource at zero MWs."<sup>20</sup>

California Energy Commission Electricity Analysis Office The No-Load Heat Rate is defined as the extrapolation of the Input-Output Curve back to the vertical axis (Input).<sup>21</sup>

Single Electric Market Operator (SEMO): "No Load Cost means the element of operating cost for a Generator Unit, submitted as part of Commercial Offer Data that is invariant with the level of Output and is incurred at all times when the level of Output is greater than zero"<sup>22</sup>

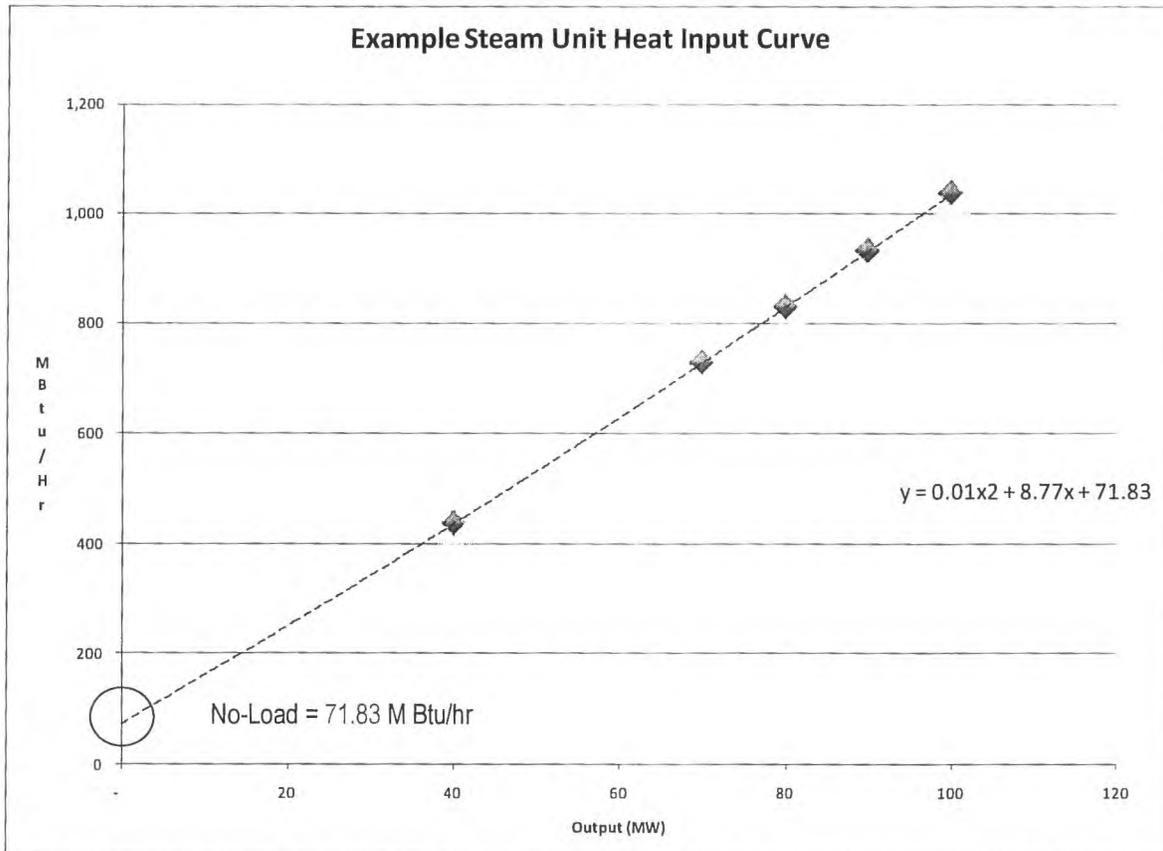
### **Appendix 1: Examples of different unit type no-load fuel calculations through extrapolation of the input-output curve**

#### *Example 1.1 Steam Units*

This is an example steam unit heat input curve. The x-axis shows output from the steam unit in MWs and the y-axis shows the heat input of fuel in MBTU/hour. The five points on the curve show the readings taken at different levels of output. These values are provided by the OEM or are determined during the initial operational testing of the generating unit. An equation (a 2<sup>nd</sup> order polynomial) is created to "fit" the curve that the steam unit's readings appear to be making. Using this equation, the resource owner can extrapolate to the 0 MW fuel inputs, which would be the no-load or zero MW fuel.



## No-Load Definition: Educational Document



The table below shows the input in MBTU/hour, output in MW, heat rate at different levels of output and incremental heat rate. These numbers correspond to what is shown in the graph above. The red 71.83 MBTU/hour is the no-load fuel, which when multiplied by the fuel costs gives us the no-load cost for the cost based offer.

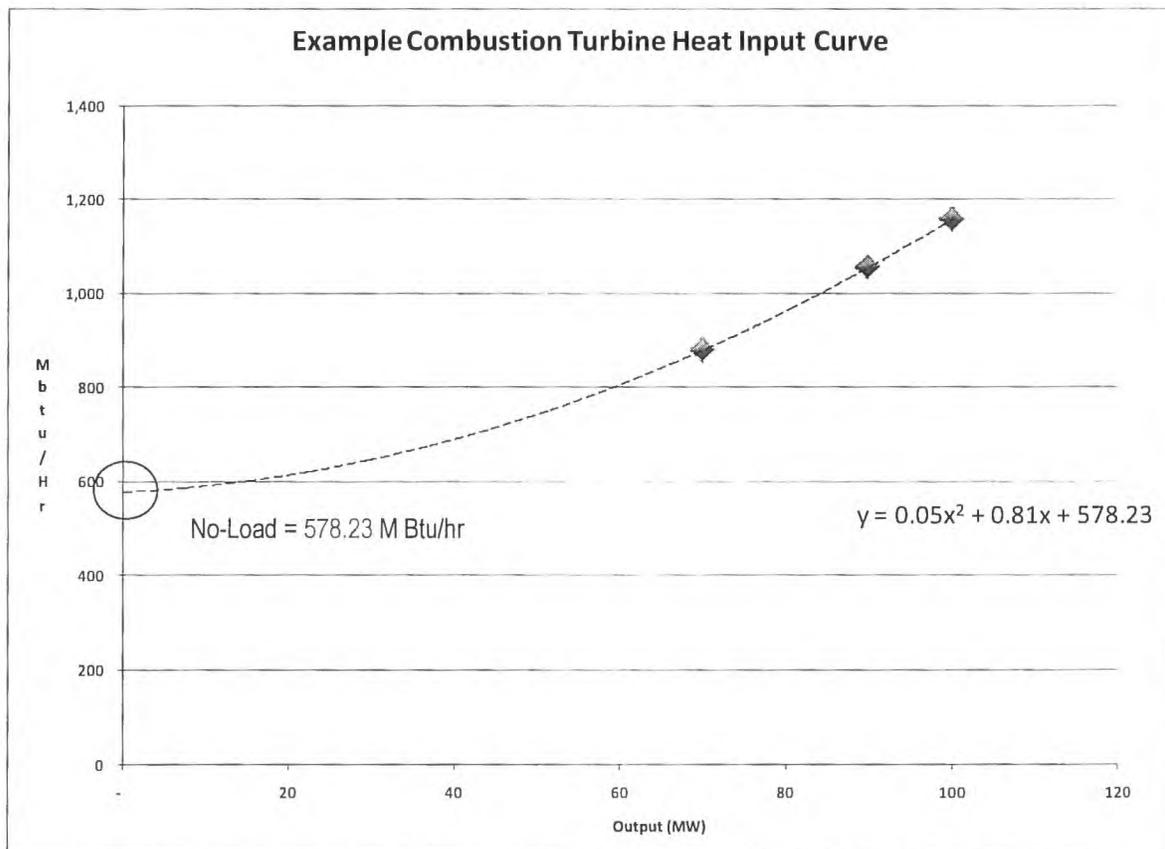
Steam Unit			
Output (MW)	Heat Input (MBtu/hr)	Heat Rate (Btu/kWh)	Incrementals (Btu/kWh)
0	71.83		
40	436.40	10,910	9,114
70	728.41	10,406	9,734
80	828.48	10,356	10,007
90	931.74	10,353	10,326
100	1,035.59	10,356	10,385



## No-Load Definition: Educational Document

### Example 1.2 Combustion Turbines

This is an example combustion turbine heat input curve. The x-axis shows output from the CT unit in MWs and the y-axis shows the heat input of fuel in MBTU/hour. The three points on the curve show the readings taken at different levels of output. These values are provided by the OEM or are determined during the initial operational testing of the generating unit. An equation (a 2<sup>nd</sup> order polynomial) is created to "fit" the curve. Using this equation the resource owner can extrapolate to the 0 MW fuel inputs, which would be the no-load or zero MW fuel.



The table below shows the input in MBTU/hour, output in MW, heat rate at different levels of output and incremental heat rate. This test was done at 59 degrees, and since heat rates can change with temperature for most combustion turbines, this temperature is noted so that the reader understands that this may not be the heat rate curve or no-load levels in every

5/11



## No-Load Definition: Educational Document

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circumstance. These numbers correspond to what is shown in the points in the graph above. The red 578.23 MBTU/hour is the no-load fuel, which when multiplied by the fuel costs gives us the no-load cost for the cost based offer at 59 degrees.

### Combustion Turbine

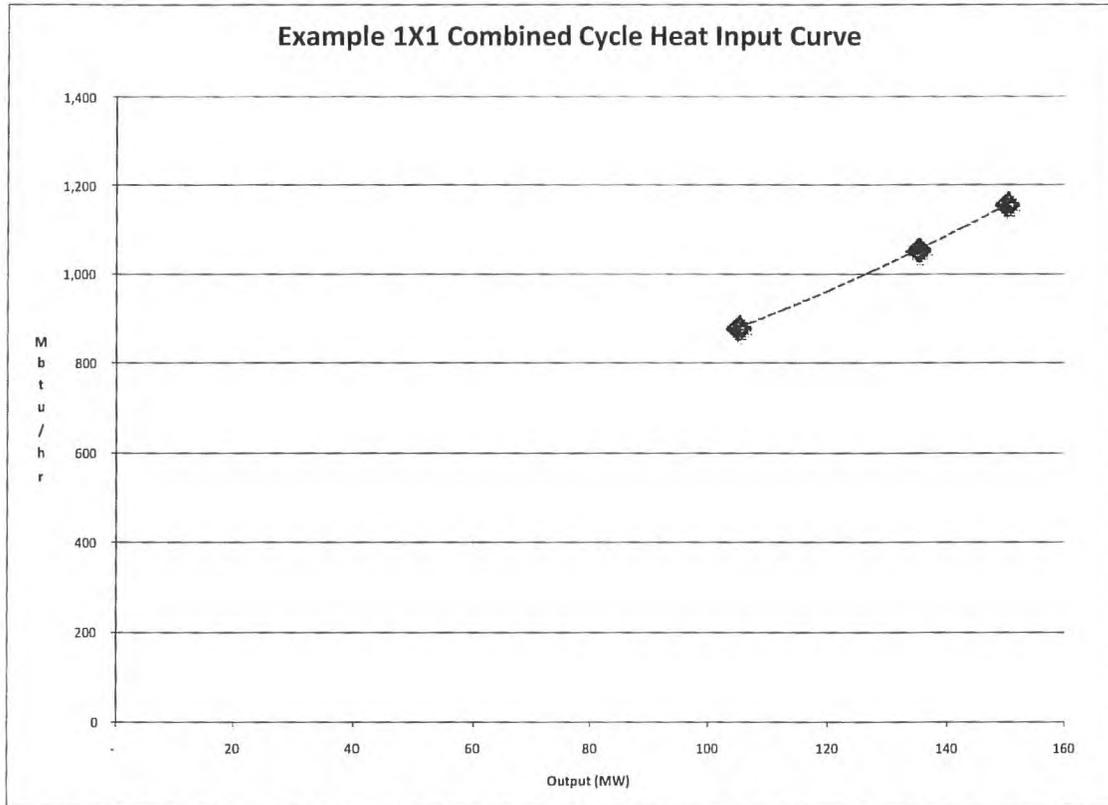
Output (MW)	Heat Input (MBtu/hr)	Heat Rate (Btu/kWh)	Incrementals (Btu/kWh)
0	578.23		
70	879.02	12,557	4,297
90	1,054.57	11,717	8,778
100	1,157.28	11,573	10,271
Conditions at 59F			

### *Example 1.3 1x1 Combined Cycle Units (Not explicit in M15)*

This is an example combined cycle heat input curve with a 1x1 operation (one combustion turbine and one Heat Recovery Steam Generator or HRSG). Since Manual 15 is not explicit in how no-load should be computed for combined cycles, the extrapolation to the y-axis is left out of these graphs. Similar to steam and CT generators, the x-axis shows output from the unit in MWs and the y-axis shows the heat input of fuel in MBTU/hour. The points on the curve show the readings taken at different levels of output.



## No-Load Definition: Educational Document



The table below shows the input in MBTU/hour, output in MW, heat rate at different levels of output and incremental heat rate. This test was done at 59 degrees, and since heat rates can change with temperature. These numbers correspond to what is shown in the points in the graph above.

### Combined Cycle - 1 on 1

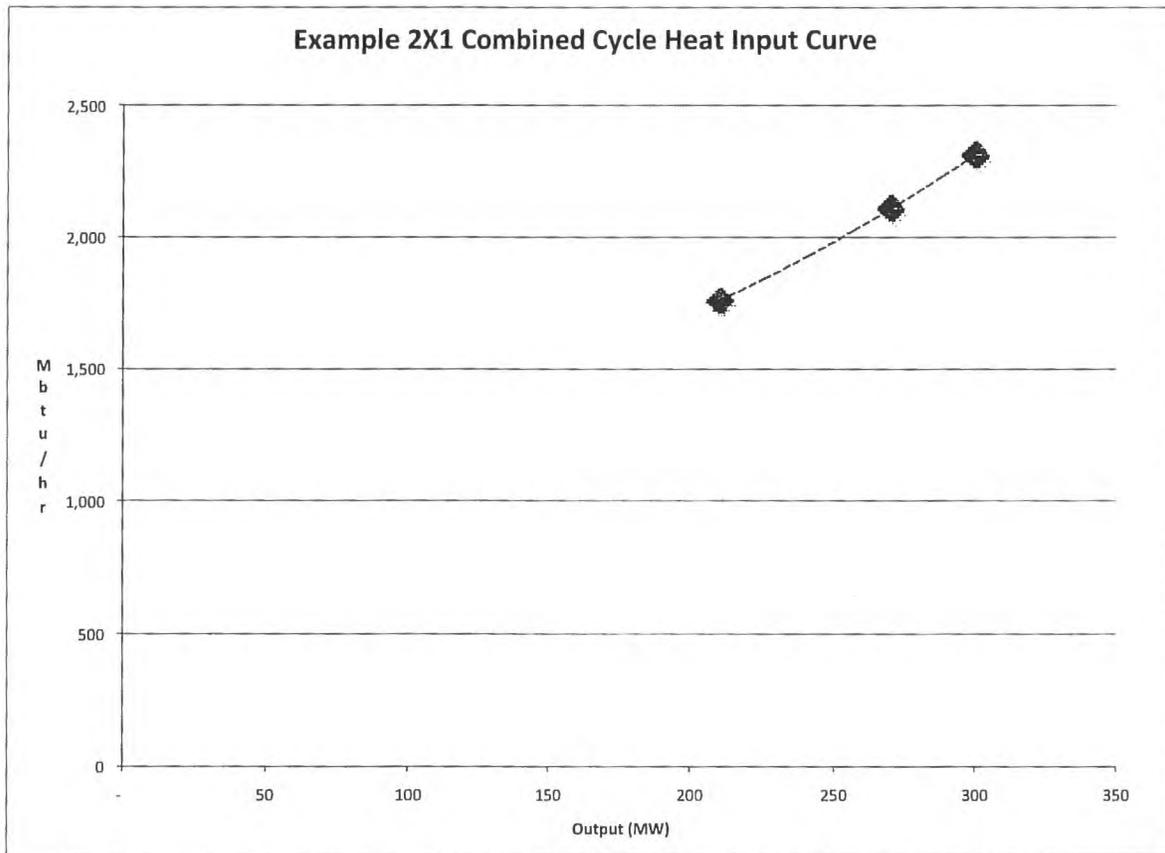
Output (MW)	Heat Input (MBtu/hr)	Heat Rate (Btu/kWh)	Incrementals (Btu/kWh)
0	578.23		
105	879.02	8,372	2,865
135	1,054.57	7,812	5,852
150	1,157.28	7,715	6,847
Conditions at 59F			



## No-Load Definition: Educational Document

### Example 1.4 1x2 Combined Cycle Units (Not explicit in M15)

This is an example combined cycle heat input curve with a 2x1 operation (two combustion turbines and one Heat Recovery Steam Generator or HRSG). The points on the curve show the readings taken at different levels of output.



The table below shows the input in MBTU/hour, output in MW, heat rate at different levels of output and incremental heat rate. These numbers correspond to what is shown in the points in the graph above.



## No-Load Definition: Educational Document

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### Combined Cycle - 2 on 1

Output (MW)	Heat Input (MBtu/hr)	Heat Rate (Btu/kWh)	
0	1,156.50		
210	1,758.04	8,372	
270	2,109.14	7,812	
300	2,314.56	7,715	
Conditions at 59F			



## No-Load Definition: Educational Document

### Appendix 2: Use of no-load by PJM

PJM calculates hourly production cost and total production cost (the cost to operate a unit for a particular time). The following example is used to illustrate the use of no-load costs in economic dispatch. Table 1 shows representative units<sup>23</sup> and inputs to their cost offer.

*Table 1: Three example units*

	Unit Stan		Unit Tom		Unit Laura	
Fuel Cost (\$/mmBtu)	\$	2	\$	20	\$	5
Start Cost (\$/start)	\$	3,448	\$	5,782	\$	11,565
No Load (\$/hour)	\$	144	\$	11,565	\$	2,891
Cost Curve	MW	Inc Price	MW	Inc Price	MW	Inc Price
Segment 1	40	\$ 18	70	\$ 86	105	\$ 14
Segment 2	80	\$ 20	90	\$ 176	135	\$ 29
Segment 3	100	\$ 21	100	\$ 205	150	\$ 34
Eco Max MW	100		100		150	
Eco Min MW	40		70		105	
Minimum Runtime (hours)	1		1		1	

PJM takes these generator inputs and calculates hourly production costs using the following equations:

$$\text{Cost at Min} = \text{No} - \text{Load} + 1\text{st incremental to min}$$

$$\text{Hourly Production Cost at Eco} - \text{Max} = \text{No} - \text{Load} + 1\text{st Segment} + 2\text{nd Segment} + 3\text{rd Segment}$$

$$\text{Operating Rate} = \frac{\text{Hourly Production Cost at Eco} - \text{Max}}{\text{Eco Max MW}}$$

*Table 2: Hourly Costs for three example units*

	Unit Stan	Unit Tom	Unit Laura
Eco Max	100	100	150
No Load (\$/hour)	\$ 144	\$ 11,565	\$ 2,891
Cost 0-Min (1st Segment)	\$ 729	\$ 6,016	\$ 1,504
Cost 1st Segment to 2nd Segment	\$ 784	\$ 3,511	\$ 878
Cost 2nd Segment to 3rd Segment	\$ 414	\$ 2,054	\$ 514
Cost at Min	\$ 873	\$ 17,580	\$ 4,395
Hourly Cost at Eco-Max	\$ 2,071	\$ 23,146	\$ 5,786
Operating Rate	\$ 20.71	\$ 231.46	\$ 38.58



## No-Load Definition: Educational Document

PJM dispatches by minimizing production cost: Hourly Production Cost and Total Production Cost. In the above table we see each unit's hourly production cost. In the table below we see the range of cost from running the unit on its eco min versus running the unit for its eco-max for the duration of its minimum runtime.

Table 3: Different total costs

	Unit Stan	Unit Tom	Unit Laura
Min Cost	\$ 4,320.64	\$ 23,362.70	\$ 15,959.70
Max Cost	\$ 5,519.02	\$ 28,927.90	\$ 17,351.00

As we can see, each unit can have a range of possible costs depending on dispatch, start cost, no load and segmented energy costs.

### Appendix 3: Where no load is entered into eMKT

**SUITE**

Unit Schedules Dispatch Lambda Market Results Regulation Market Synchronized Reserve Market DA Scheduling Reserve Market Param

Schedule Offers Schedule Detail Schedule Manager Schedule Selection

**Schedule Offers Search**

Portfolio CDS Unit: STEAM Date: 06/11/2011  
(mm/dd/yyyy)

Schedule Cost - Gas

**Startup Costs** No Load:  Cold Intermediate: - Hot: -

Use offer slope:

**Schedule Offers on 06/11/2011**

GW	Price
----	-------

No Load is entered on the Schedules – Schedules Offers page in eMKT.



## No-Load Definition: Educational Document

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<sup>1</sup> Kirschen, Daniel Sadi and Strbac, Goran. *Fundamentals of Power Economics*. West Sussex, England: John Wiley and Sons, 2004. Print. page 84

<sup>2</sup> M15: Section 1.7 and Section 2.5.1

<sup>3</sup> M15: Section 2.5.1

<sup>4</sup> M15: Section 1.7.3-1.7.4

<sup>5</sup> M15: Section 2.2.3 and 2.5.2

<sup>6</sup> M15: Section 6.1

<sup>7</sup> M15: Section 6.3.2

<sup>8</sup> M15: Section 7.1

<sup>9</sup> OATT Page 590

<sup>10</sup> OATT page 1699

<sup>11</sup> OATT Page 1706 and OATT Page 1709

<sup>13</sup> OATT Page 1711

<sup>14</sup> OATT Page 1722 OATT Page 1745

<sup>16</sup> OATT 1769

<sup>17</sup> OATT Page 1883

<sup>18</sup> Scheduling Process in eMKT, Page 54-55

<sup>19</sup> [http://www.nyiso.com/public/webdocs/documents/manuals/operations/dayahd\\_schd\\_mnl.pdf](http://www.nyiso.com/public/webdocs/documents/manuals/operations/dayahd_schd_mnl.pdf)

<sup>20</sup> MISO FAQ for RSG

<sup>21</sup> <http://nodal.ercot.com/docs/tntarc/mo/CAHeatRates.pdf>

<sup>22</sup> The Single Electricity Market (SEM) is the wholesale electricity market operating in the Republic of Ireland and Northern Ireland.

<sup>23</sup> All characters appearing in this work are fictitious. Any resemblance to real persons, living or dead is purely coincidental.

## KU

	Native Load Fuel Cost	Fuel Cost \$/Mwh Native Load	Off-System Sales Fuel Cost	Fuel Cost \$/Mwh Off-System Sales
January 2014	\$75,881,354	32.04	\$3,366	\$19.68
February 2014	\$60,376,249	31.04	NA	NA
March 2014	\$60,258,925	32.49	NA	NA
April 2014	\$50,801,496	33.89	NA	NA

## LG&E

	Native Load Fuel Cost	Fuel Cost \$/Mwh Native Load	Off-System Sales Fuel Cost	Fuel Cost \$/Mwh Off-System Sales
January 2014	\$31,111,245	29.45	\$3,925,186	\$44.87
February 2014	\$25,865,627	28.74	\$2,896,148	\$37.64
March 2014	\$25,825,990	28.85	\$2,199,568	\$41.14
April 2014	\$24,879,280	30.42	\$54,998	\$48.80



a PPL company

Jeff DeRouen, Executive Director  
Public Service Commission of Kentucky  
Attention: Ms. Chris Whelan  
211 Sower Boulevard  
P.O. Box 615  
Frankfort, Kentucky 40602

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FEB 21 2014

PUBLIC SERVICE  
COMMISSION

Kentucky Utilities Company  
State Regulation and Rates  
220 West Main Street  
P.O. 32010  
Louisville, Kentucky 40232  
www.lge-ku.com

Robert M. Conroy  
Director - Rates  
T 502-627-3324  
F 502-627-3213  
robert.conroy@lge-ku.com

February 21, 2014

Dear Mr. DeRouen:

In compliance with 807 KAR 5:056, Kentucky Utilities Company herewith files its monthly fuel adjustment factor applicable to billings under retail rates during the March 2014 billing cycle which begins March 3, 2014.

The necessary supporting data to justify the amount of the adjustment is included. Please contact me if you have any questions about this filing.

Sincerely,

Robert M. Conroy

Enclosure

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**KENTUCKY UTILITIES COMPANY**  
**FUEL ADJUSTMENT CLAUSE SCHEDULE**

Expense Month : January 2014

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$$\frac{\text{Fuel "Fm" (Fuel Cost Schedule)} \quad \$75,881,354}{\text{Sales "Sm" (Sales Schedule)} \quad 2,367,988,437 \quad \text{KWH}} = (+) \$ 0.03204 / \text{KWH}$$

Per PSC approved Tariff Sheet No. 85.1 effective June 26, 2013. = (-) \$ 0.02892 / KWH

$$\text{FAC Factor (1)} = \underline{\underline{\$ 0.00312 / \text{KWH}}}$$

Note: (1) Five decimal places in dollars for normal rounding.

Effective Date for Billing: March 3, 2014

Submitted by



Title: Director, Rates

**KENTUCKY UTILITIES COMPANY  
FUEL COST SCHEDULE**

Expense Month : January 2014

(A) <u>Company Generation</u>			
Coal Burned	(+)	\$46,370,476	(1)
Oil Burned	(+)	464,822	(1)
Gas Burned	(+)	16,205,744	
Fuel (assigned cost during Forced Outage)	(+)	1,030,354	
Fuel (substitute cost for Forced Outage)	(-)	1,077,393	
SUB-TOTAL		\$ 62,994,003	
(B) <u>Purchases</u>			
Net energy cost - economy purchases	(+) \$	1,933,690	
Identifiable fuel cost - other purchases	(+)	-	
Identifiable fuel cost (substitute for Forced Outage)	(-)	1,596	
Less Purchases above Highest Cost Units	(-)	1,006,178	
Internal Economy	(+)	13,353,519	
Internal Replacement	(+)	-	
SUB-TOTAL		\$ 14,279,435	
(C) <u>Inter-System Sales</u>			
Including Interchange-out	(+) \$	3,366	
Internal Economy	(+)	-	
Internal Replacement	(+)	2,720,537	
Dollars Assigned to Inter-System Sales Losses	(+)	17	
SUB-TOTAL		\$ 2,723,920	
(D) <u>Over or (Under) Recovery</u>			
From Page 5, Line 13		\$ (1,331,836)	
TOTAL FUEL RECOVERY (A+B-C-D) =		\$ 75,881,354	

Note: (1) Reflects exclusion of IMEA/IMPA portion of Trimble County Unit 2 fuel cost with recognition of 0.5% transmission losses per Commission's Order in Case No. 2012-00552.

Coal burned = \$4,092  
Oil burned = \$27

## KENTUCKY UTILITIES COMPANY

### SALES SCHEDULE (KWH)

Expense Month : January 2014

(A) Generation (Net)	(+)	2,052,428,000
Purchases including interchange-in	(+)	69,081,000
Internal Economy	(+)	447,497,000
Internal Replacement	(+)	-
SUB-TOTAL		<u>2,569,006,000</u>
(B) Inter-system Sales including interchange-out	(+)	171,000
Internal Economy	(+)	-
Internal Replacement	(+)	54,875,000
(*) System Losses	(+)	145,971,563
SUB-TOTAL		<u>201,017,563</u>
TOTAL SALES (A-B)		<u>2,367,988,437</u>

(\*) Note: See Page 4 of 6, "Adjustment of rolling 12-MTD average overall system losses to reflect losses

**KENTUCKY UTILITIES COMPANY**

**ADJUSTMENT OF ROLLING 12-MTD AVERAGE OVERALL SYSTEM  
LOSSES TO REFLECT LOSSES AT RETAIL LEVEL**

Expense Month : January 2014

12 Months to Date KWH Sources: 23,377,589,900 KWH  
 12 MTD Overall System Losses: 1,328,320,558 KWH  
 January 2014 KWH Sources: 2,569,006,000 KWH

$$1,328,320,558 / 23,377,589,900 = 5.682025\%$$

$$5.682025\% \times 2,569,006,000 = 145,971,563 \text{ KWH}$$

**WHOLESALE KWH SALES AND LOSSES**

267,341,438 Wholesale Sales & Deliveries to ODP at Transmission Voltage (WS-T)  
 54,170,400 Wholesale sales at Primary Voltage (WS-P)  
 55,046,000 Intersystem Sales at Transmission Voltage (IS-T)

	Wholesale Sales\Deliveries	Loss Percentage	Losses	Wholesale Sources
WS-T:	267,341,438	2.153%	5,882,512	273,223,950
WS-P:	54,170,400	2.153% and 0.985%	1,742,695	55,913,095
IS-T:	55,046,000	0.5%	276,613	55,322,613

KENTUCKY UTILITIES COMPANY  
FUEL ADJUSTMENT CLAUSE  
OVER OR (UNDER) RECOVERY SCHEDULE

Expense Month : January 2014

1.	Last FAC Rate Billed		<u>(\$0.00277)</u>
2.	KWH Billed at Above Rate		<u>1,930,734,726</u>
3.	FAC Revenue/(Refund)	(Line 1 x Line 2)	<u>\$ (5,348,135)</u>
4.	KWH Used to Determine Last FAC Rate		<u>1,746,785,802</u>
5.	Non-Jurisdictional KWH (Included in Line 4)		<u>230,957,544</u>
6.	Kentucky Jurisdictional KWH	(Line 4 - Line 5)	<u>1,515,828,258</u>
7.	Revised FAC Rate Billed, if prior period adjustment is needed (See Note 1)		<u>\$0.00000</u>
8.	Recoverable FAC Revenue/(Refund)	(Line 1 x Line 6)	<u>\$ (4,198,844)</u>
9.	Over or (Under) Recovery	(Line 3 - Line 8)	<u>\$ (1,149,291)</u>
10.	Total Sales "Sm" (From Page 3 of 6)		<u>2,367,988,437</u>
11.	Kentucky Jurisdictional Sales		<u>2,043,425,321</u>
12.	Total Sales Divided by Kentucky Jurisdictional Sales (Line 10 / Line 11)		<u>1.15883287</u>
13.	Total Company Over or (Under) Recovery	(Line 9 x Line 12)	<u>\$ (1,331,836)</u>

**FUEL ADJUSTMENT CLAUSE  
INTERCOMPANY TRANSACTIONS**  
Expense Month : January 2014

**KENTUCKY UTILITIES COMPANY**

		KWH	
<b>Purchases</b>			
Internal Economy	\$ 12,610,206.67	447,497,000	Fuel for LGE Sale to KU for Native Load
	743,312.79		Half of Split Savings to LGE from KU
	<u>\$ 13,353,519.46</u>	<u>447,497,000</u>	
Internal Replacement	\$ -	0	Freed-up LGE Generation sold back to KU
	-	0	LGE Generation for KU Pre-Merger Sales
	<u>\$ -</u>	<u>0</u>	
Total Purchases	<u>\$ 13,353,519.46</u>	<u>447,497,000</u>	
<b>Sales</b>			
Internal Economy	\$ -	0	KU Fuel Cost - Sales to LGE Native Load
	-	0	Half of Split Savings
	<u>\$ -</u>	<u>0</u>	
Internal Replacement	\$ 2,720,537.02	54,875,000	Freed-up KU Generation sold back to LGE
	-	0	KU Generation for LGE Pre-Merger
	-	0	KU Generation for LGE IB
	<u>\$ 2,720,537.02</u>	<u>54,875,000</u>	
Total Sales	<u>\$ 2,720,537.02</u>	<u>54,875,000</u>	

**LOUISVILLE GAS AND ELECTRIC COMPANY**

		KWH	
<b>Purchases</b>			
Internal Economy	\$ -	0	KU Fuel Cost - Sales to LGE Native Load
	-	0	Half of Split Savings
	<u>\$ -</u>	<u>0</u>	
Internal Replacement	\$ 2,720,537.02	54,875,000	Freed-up KU Generation sold back to LGE
	-	0	KU Generation for LGE Pre-Merger
	-	0	KU Generation for LGE IB
	<u>\$ 2,720,537.02</u>	<u>54,875,000</u>	
Total Purchases	<u>\$ 2,720,537.02</u>	<u>54,875,000</u>	
<b>Sales</b>			
Internal Economy	\$ 12,610,206.67	447,497,000	Fuel for LGE Sale to KU for Native Load
	743,312.79	447,497,000	Half of Split Savings to LGE from KU
	<u>\$ 13,353,519.46</u>	<u>447,497,000</u>	
Internal Replacement	\$ -	0	Freed-up LGE Generation sold back to KU
	-	0	LGE Generation for KU Pre-Merger Sales
	<u>\$ -</u>	<u>0</u>	
Total Sales	<u>\$ 13,353,519.46</u>	<u>447,497,000</u>	

FA. Whelan-



a PPL company

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MAR 21 2014

PUBLIC SERVICE  
COMMISSION

Jeff DeRouen, Executive Director  
Public Service Commission of Kentucky  
Attention: Ms. Chris Whelan  
211 Sower Boulevard  
P.O. Box 615  
Frankfort, Kentucky 40602

Kentucky Utilities Company  
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www.lge-ku.com

Robert M. Conroy  
Director - Rates  
T 502-627-3324  
F 502-627-3213  
robert.conroy@lge-ku.com

March 21, 2014

Dear Mr. DeRouen:

In compliance with 807 KAR 5:056, Kentucky Utilities Company herewith files its monthly fuel adjustment factor applicable to billings under retail rates during the April 2014 billing cycle which begins April 1, 2014.

The necessary supporting data to justify the amount of the adjustment is included. Please contact me if you have any questions about this filing.

Sincerely,

A handwritten signature in black ink, appearing to read 'R. M. Conroy'.

Robert M. Conroy

Enclosure

MAR 24 2014

**KENTUCKY UTILITIES COMPANY**  
**FUEL ADJUSTMENT CLAUSE SCHEDULE**

Expense Month : February 2014

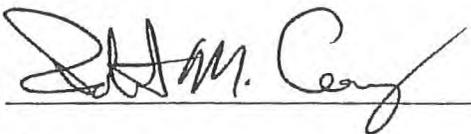
$$\begin{array}{r} \text{Fuel "Fm" (Fuel Cost Schedule)} \\ \hline \end{array} = \begin{array}{r} \$60,376,249 \\ \hline \end{array} = (+) \$ \text{ 0.03104 / KWH}$$
$$\begin{array}{r} \text{Sales "Sm" (Sales Schedule)} \\ \hline \end{array} = \begin{array}{r} 1,945,308,015 \text{ KWH} \\ \hline \end{array}$$

Per PSC approved Tariff Sheet No. 85.1 effective June 26, 2013. = (-) \$ 0.02892 / KWH

$$\text{FAC Factor (1)} = \underline{\underline{\$ 0.00212 / KWH}}$$

Note: (1) Five decimal places in dollars for normal rounding.

Effective Date for Billing: April 1, 2014

Submitted by 

Title: Director, Rates

**KENTUCKY UTILITIES COMPANY  
FUEL COST SCHEDULE**

Expense Month : February 2014

<u>(A) Company Generation</u>			
Coal Burned	(+)	\$39,648,794	(1)
Oil Burned	(+)	370,574	(1)
Gas Burned	(+)	9,321,531	
Fuel (assigned cost during Forced Outage)	(+)	231,041	*
Fuel (substitute cost for Forced Outage)	(-)	205,390	*
SUB-TOTAL		\$ 49,340,899	
<u>(B) Purchases</u>			
Net energy cost - economy purchases	(+) \$	733,311	
Identifiable fuel cost - other purchases	(+)	-	
Identifiable fuel cost (substitute for Forced Outage)	(-)	721	*
Less Purchases above Highest Cost Units	(-)	-	
Internal Economy	(+)	11,631,949	
Internal Replacement	(+)	-	
SUB-TOTAL		\$ 12,365,260	
<u>(C) Inter-System Sales</u>			
Including Interchange-out	(+) \$	-	
Internal Economy	(+)	-	
Internal Replacement	(+)	1,653,610	
Dollars Assigned to Inter-System Sales Losses	(+)	-	
SUB-TOTAL		\$ 1,653,610	
<u>(D) Over or (Under) Recovery</u>			
From Page 5, Line 13		\$ (323,700)	
TOTAL FUEL RECOVERY (A+B-C-D) =		\$ 60,376,249	

Note: (1) Reflects exclusion of IMEA/IMPA portion of Trimble County Unit 2 fuel cost with recognition of 0.5% transmission losses per Commission's Order in Case No. 2012-00552.

Coal burned = \$951  
Oil burned = \$35

\* Excluded from calculations per 807 KAR 5:056 due to fuel cost for substitute generation and purchases being less than assigned cost during Forced Outage.

**KENTUCKY UTILITIES COMPANY**

**SALES SCHEDULE (KWH)**

Expense Month : February 2014

(A) Generation (Net)	(+)	1,657,659,000
Purchases including interchange-in	(+)	44,825,000
Internal Economy	(+)	405,407,000
Internal Replacement	(+)	-
SUB-TOTAL		<u>2,107,891,000</u>
(B) Inter-system Sales including interchange-out	(+)	78,000
Internal Economy	(+)	-
Internal Replacement	(+)	39,368,000
(*) System Losses	(+)	123,136,985
SUB-TOTAL		<u>162,582,985</u>
TOTAL SALES (A-B)		<u>1,945,308,015</u>

(\*) Note: See Page 4 of 6, "Adjustment of rolling 12-MTD average overall system losses to reflect losses

**KENTUCKY UTILITIES COMPANY**

**ADJUSTMENT OF ROLLING 12-MTD AVERAGE OVERALL SYSTEM  
LOSSES TO REFLECT LOSSES AT RETAIL LEVEL**

Expense Month : February 2014

12 Months to Date KWH Sources: 23,555,388,000 KWH  
 12 MTD Overall System Losses: 1,376,038,519 KWH  
 February 2014 KWH Sources: 2,107,891,000 KWH

$$1,376,038,519 / 23,555,388,000 = 5.841715\%$$

$$5.841715\% \times 2,107,891,000 = 123,136,985 \text{ KWH}$$

**WHOLESALE KWH SALES AND LOSSES**

208,718,444 Wholesale Sales & Deliveries to ODP at Transmission Voltage (WS-T)  
 47,137,600 Wholesale sales at Primary Voltage (WS-P)  
 39,446,000 Intersystem Sales at Transmission Voltage (IS-T)

	Wholesale Sales\Deliveries	Loss Percentage	Losses	Wholesale Sources
WS-T:	208,718,444	2.153%	4,592,586	213,311,030
WS-P:	47,137,600	2.153% and 0.985%	1,516,446	48,654,046
IS-T:	39,446,000	0.5%	198,221	39,644,221

**KENTUCKY UTILITIES COMPANY**  
**FUEL ADJUSTMENT CLAUSE**  
**OVER OR (UNDER) RECOVERY SCHEDULE**

Expense Month : February 2014

1.	Last FAC Rate Billed		<u>(\$0.00146)</u>
2.	KWH Billed at Above Rate		<u>1,877,517,285</u>
3.	FAC Revenue/(Refund)	(Line 1 x Line 2)	<u>\$ (2,741,175)</u>
4.	KWH Used to Determine Last FAC Rate		<u>1,947,916,023</u>
5.	Non-Jurisdictional KWH (Included in Line 4)		<u>262,604,394</u>
6.	Kentucky Jurisdictional KWH	(Line 4 - Line 5)	<u>1,685,311,629</u>
7.	Revised FAC Rate Billed, if prior period adjustment is needed (See Note 1)		<u>\$0.00000</u>
8.	Recoverable FAC Revenue/(Refund)	(Line 1 x Line 6)	<u>\$ (2,460,555)</u>
9.	Over or (Under) Recovery	(Line 3 - Line 8)	<u>\$ (280,620)</u>
10.	Total Sales "Sm" (From Page 3 of 6)		<u>1,945,308,015</u>
11.	Kentucky Jurisdictional Sales		<u>1,686,413,226</u>
12.	Total Sales Divided by Kentucky Jurisdictional Sales (Line 10 / Line 11)		<u>1.153518</u>
13.	Total Company Over or (Under) Recovery	(Line 9 x Line 12)	<u>\$ (323,700)</u>

**FUEL ADJUSTMENT CLAUSE  
INTERCOMPANY TRANSACTIONS**  
Expense Month : February 2014

**KENTUCKY UTILITIES COMPANY**

		KWH	
<b>Purchases</b>			
Internal Economy			
	\$ 11,263,655.77	405,407,000	Fuel for LGE Sale to KU for Native Load
	368,293.64		Half of Split Savings to LGE from KU
	<u>\$ 11,631,949.41</u>	<u>405,407,000</u>	
Internal Replacement			
	\$ -	0	Freed-up LGE Generation sold back to KU
	-	0	LGE Generation for KU Pre-Merger Sales
	<u>\$ -</u>	<u>0</u>	
Total Purchases	<u>\$ 11,631,949.41</u>	<u>405,407,000</u>	
<b>Sales</b>			
Internal Economy			
	\$ -	0	KU Fuel Cost - Sales to LGE Native Load
	-		Half of Split Savings
	<u>\$ -</u>	<u>0</u>	
Internal Replacement			
	\$ 1,653,609.72	39,368,000	Freed-up KU Generation sold back to LGE
	-	0	KU Generation for LGE Pre-Merger
	-	0	KU Generation for LGE IB
	<u>\$ 1,653,609.72</u>	<u>39,368,000</u>	
Total Sales	<u>\$ 1,653,609.72</u>	<u>39,368,000</u>	

**LOUISVILLE GAS AND ELECTRIC COMPANY**

		KWH	
<b>Purchases</b>			
Internal Economy			
	\$ -	0	KU Fuel Cost - Sales to LGE Native Load
	-		Half of Split Savings
	<u>\$ -</u>	<u>0</u>	
Internal Replacement			
	\$ 1,653,609.72	39,368,000	Freed-up KU Generation sold back to LGE
	-	0	KU Generation for LGE Pre-Merger
	-	0	KU Generation for LGE IB
	<u>\$ 1,653,609.72</u>	<u>39,368,000</u>	
Total Purchases	<u>\$ 1,653,609.72</u>	<u>39,368,000</u>	
<b>Sales</b>			
Internal Economy			
	\$ 11,263,655.77	405,407,000	Fuel for LGE Sale to KU for Native Load
	368,293.64		Half of Split Savings to LGE from KU
	<u>\$ 11,631,949.41</u>	<u>405,407,000</u>	
Internal Replacement			
	\$ -	0	Freed-up LGE Generation sold back to KU
	-	0	LGE Generation for KU Pre-Merger Sales
	<u>\$ -</u>	<u>0</u>	
Total Sales	<u>\$ 11,631,949.41</u>	<u>405,407,000</u>	

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APR 21 2014  
PUBLIC SERVICE  
COMMISSION

Jeff DeRouen, Executive Director  
Public Service Commission of Kentucky  
Attention: Ms. Chris Whelan  
211 Sower Boulevard  
P.O. Box 615  
Frankfort, Kentucky 40602

Kentucky Utilities Company  
State Regulation and Rates  
220 West Main Street  
P.O. 32010  
Louisville, Kentucky 40232  
www.lge-ku.com

Robert M. Conroy  
Director - Rates  
T 502-627-3324  
F 502-627-3213  
robert.conroy@lge-ku.com

April 21, 2014

Dear Mr. DeRouen:

In compliance with 807 KAR 5:056, Kentucky Utilities Company herewith files its monthly fuel adjustment factor applicable to billings under retail rates during the May 2014 billing cycle which begins May 1, 2014.

The necessary supporting data to justify the amount of the adjustment is included. Please contact me if you have any questions about this filing.

Sincerely,

A handwritten signature in black ink, appearing to read 'R. M. Conroy', written over a faint, larger version of the same signature.

Robert M. Conroy

Enclosure

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COMMISSION

KENTUCKY UTILITIES COMPANY  
FUEL ADJUSTMENT CLAUSE SCHEDULE

Expense Month : March 2014

$$\frac{\text{Fuel "Fm" (Fuel Cost Schedule)}}{\text{Sales "Sm" (Sales Schedule)}} = \frac{\$60,258,925}{1,854,611,056 \text{ KWH}} = (+) \$ 0.03249 / \text{KWH}$$

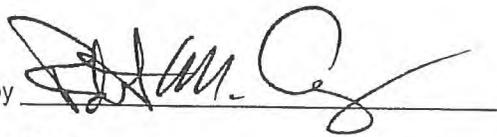
$$\text{Per PSC approved Tariff Sheet No. 85.1 effective June 26, 2013.} = (-) \$ 0.02892 / \text{KWH}$$

$$\text{FAC Factor (1)} = \underline{\underline{\$ 0.00357 / \text{KWH}}}$$

Note: (1) Five decimal places in dollars for normal rounding.

Effective Date for Billing: May 1, 2014

Submitted by



Title: Director, Rates

**KENTUCKY UTILITIES COMPANY  
FUEL COST SCHEDULE**

Expense Month : March 2014

(A) <u>Company Generation</u>			
Coal Burned	(+)	\$37,732,371	(1)
Oil Burned	(+)	1,006,048	(1)
Gas Burned	(+)	8,583,319	
Fuel (assigned cost during Forced Outage)	(+)	734,874	
Fuel (substitute cost for Forced Outage)	(-)	683,000	
SUB-TOTAL		\$ 47,373,612	
(B) <u>Purchases</u>			
Net energy cost - economy purchases	(+) \$	1,136,491	
Identifiable fuel cost - other purchases	(+)	-	
Identifiable fuel cost (substitute for Forced Outage)	(-)	55,192	
Less Purchases above Highest Cost Units	(-)	-	
Internal Economy	(+)	11,932,840	
Internal Replacement	(+)	-	
SUB-TOTAL		\$ 13,014,139	
(C) <u>Inter-System Sales</u>			
Including Interchange-out	(+) \$	-	
Internal Economy	(+)	-	
Internal Replacement	(+)	1,331,515	
Dollars Assigned to Inter-System Sales Losses	(+)	-	
SUB-TOTAL		\$ 1,331,515	
(D) <u>Over or (Under) Recovery</u>			
From Page 5, Line 13		\$ (1,202,689)	
TOTAL FUEL RECOVERY (A+B-C-D) =		\$ 60,258,925	

Note: (1) Reflects exclusion of IMEA/IMPA portion of Trimble County Unit 2 fuel cost with recognition of 0.5% transmission losses per Commission's Order in Case No. 2012-00552.

Coal burned = \$0  
Oil burned = \$0

**KENTUCKY UTILITIES COMPANY**

**SALES SCHEDULE (KWH)**

Expense Month : March 2014

(A) Generation (Net)	(+)	1,535,594,000
Purchases including interchange-in	(+)	44,324,000
Internal Economy	(+)	421,652,000
Internal Replacement	(+)	-
SUB-TOTAL		<u>2,001,570,000</u>
(B) Inter-system Sales including interchange-out	(+)	15,000
Internal Economy	(+)	-
Internal Replacement	(+)	28,961,000
(*) System Losses	(+)	117,982,944
SUB-TOTAL		<u>146,958,944</u>
TOTAL SALES (A-B)		<u>1,854,611,056</u>

(\*) Note: See Page 4 of 6, "Adjustment of rolling 12-MTD average overall system losses to reflect losses

**KENTUCKY UTILITIES COMPANY**

**ADJUSTMENT OF ROLLING 12-MTD AVERAGE OVERALL SYSTEM  
LOSSES TO REFLECT LOSSES AT RETAIL LEVEL**

Expense Month : March 2014

12 Months to Date KWH Sources:	23,523,014,000	KWH
12 MTD Overall System Losses:	1,386,568,719	KWH
March 2014 KWH Sources:	2,001,570,000	KWH
	1,386,568,719 /	23,523,014,000 = 5.894520%
	5.894520% X	2,001,570,000 = 117,982,944 KWH

**WHOLESALE KWH SALES AND LOSSES**

195,539,811	Wholesale Sales & Deliveries to ODP at Transmission Voltage	(WS-T)	
46,354,000	Wholesale sales at Primary Voltage	(WS-P)	
28,976,000	Intersystem Sales at Transmission Voltage	(IS-T)	
	<u>Wholesale</u>	<u>Loss</u>	<u>Wholesale</u>
	<u>Sales\Deliveries</u>	<u>Percentage</u>	<u>Losses</u>
WS-T:	195,539,811	2.153%	4,302,607
WS-P:	46,354,000	2.153% and 0.985%	1,491,237
IS-T:	28,976,000	0.5%	145,608
			199,842,418
			47,845,237
			29,121,608

KENTUCKY UTILITIES COMPANY  
FUEL ADJUSTMENT CLAUSE  
OVER OR (UNDER) RECOVERY SCHEDULE

Expense Month : March 2014

1.	Last FAC Rate Billed		<u>\$0.00312</u>
2.	KWH Billed at Above Rate		<u>1,708,807,531</u>
3.	FAC Revenue/(Refund)	(Line 1 x Line 2)	<u>\$ 5,331,479</u>
4.	KWH Used to Determine Last FAC Rate		<u>2,367,988,437</u>
5.	Non-Jurisdictional KWH (Included in Line 4)		<u>324,563,116</u>
6.	Kentucky Jurisdictional KWH	(Line 4 - Line 5)	<u>2,043,425,321</u>
7.	Revised FAC Rate Billed, if prior period adjustment is needed (See Note 1)		<u>\$0.00000</u>
8.	Recoverable FAC Revenue/(Refund)	(Line 1 x Line 6)	<u>\$ 6,375,487</u>
9.	Over or (Under) Recovery	(Line 3 - Line 8)	<u>\$ (1,044,008)</u>
10.	Total Sales "Sm" (From Page 3 of 6)		<u>1,854,611,056</u>
11.	Kentucky Jurisdictional Sales		<u>1,609,916,257</u>
12.	Total Sales Divided by Kentucky Jurisdictional Sales (Line 10 / Line 11)		<u>1.15199225</u>
13.	Total Company Over or (Under) Recovery	(Line 9 x Line 12)	<u>\$ (1,202,689)</u>

FUEL ADJUSTMENT CLAUSE  
INTERCOMPANY TRANSACTIONS  
Expense Month : March 2014

KENTUCKY UTILITIES COMPANY

Purchases		KWH	
Internal Economy	\$ 11,609,548.57	421,652,000	Fuel for LGE Sale to KU for Native Load
	323,291.36		Half of Split Savings to LGE from KU
	<u>\$ 11,932,839.93</u>	<u>421,652,000</u>	
Internal Replacement	\$ -	0	Freed-up LGE Generation sold back to KU
	-	0	LGE Generation for KU Pre-Merger Sales
	<u>\$ -</u>	<u>0</u>	
Total Purchases	<u>\$ 11,932,839.93</u>	<u>421,652,000</u>	
Sales			
Internal Economy	\$ -	0	KU Fuel Cost - Sales to LGE Native Load
	-		Half of Split Savings
	<u>\$ -</u>	<u>0</u>	
Internal Replacement	\$ 1,331,515.43	28,961,000	Freed-up KU Generation sold back to LGE
	-	0	KU Generation for LGE Pre-Merger
	-	0	KU Generation for LGE IB
	<u>\$ 1,331,515.43</u>	<u>28,961,000</u>	
Total Sales	<u>\$ 1,331,515.43</u>	<u>28,961,000</u>	

LOUISVILLE GAS AND ELECTRIC COMPANY

Purchases		KWH	
Internal Economy	\$ -	0	KU Fuel Cost - Sales to LGE Native Load
	-		Half of Split Savings
	<u>\$ -</u>	<u>0</u>	
Internal Replacement	\$ 1,331,515.43	28,961,000	Freed-up KU Generation sold back to LGE
	-	0	KU Generation for LGE Pre-Merger
	-	0	KU Generation for LGE IB
	<u>\$ 1,331,515.43</u>	<u>28,961,000</u>	
Total Purchases	<u>\$ 1,331,515.43</u>	<u>28,961,000</u>	
Sales			
Internal Economy	\$ 11,609,548.57	421,652,000	Fuel for LGE Sale to KU for Native Load
	323,291.36		Half of Split Savings to LGE from KU
	<u>\$ 11,932,839.93</u>	<u>421,652,000</u>	
Internal Replacement	\$ -	0	Freed-up LGE Generation sold back to KU
	-	0	LGE Generation for KU Pre-Merger Sales
	<u>\$ -</u>	<u>0</u>	
Total Sales	<u>\$ 11,932,839.93</u>	<u>421,652,000</u>	

FA Whelan

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MAY 23 2014

PUBLIC SERVICE  
COMMISSION



a PPL company

Jeff DeRouen, Executive Director  
Public Service Commission of Kentucky  
Attention: Ms. Chris Whelan  
211 Sower Boulevard  
P.O. Box 615  
Frankfort, Kentucky 40602

**Kentucky Utilities Company**  
State Regulation and Rates  
220 West Main Street  
P.O. 32010  
Louisville, Kentucky 40232  
www.lge-ku.com

Robert M. Conroy  
Director - Rates  
T 502-627-3324  
F 502-627-3213  
robert.conroy@lge-ku.com

May 23, 2014

Dear Mr. DeRouen:

In compliance with 807 KAR 5:056, Kentucky Utilities Company herewith files its monthly fuel adjustment factor applicable to billings under retail rates during the June 2014 billing cycle which begins June 2, 2014.

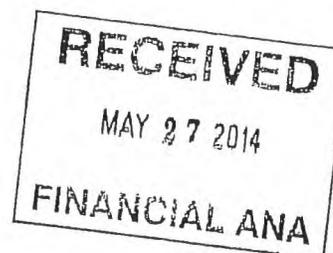
The necessary supporting data to justify the amount of the adjustment is included. Please contact me if you have any questions about this filing.

Sincerely,

A handwritten signature in black ink, appearing to read 'R. M. Conroy', written over a horizontal line.

Robert M. Conroy

Enclosure



**KENTUCKY UTILITIES COMPANY**  
**FUEL ADJUSTMENT CLAUSE SCHEDULE**

Expense Month : April 2014

$$\frac{\text{Fuel "Fm" (Fuel Cost Schedule)}}{\text{Sales "Sm" (Sales Schedule)}} = \frac{\$50,801,496}{1,498,874,749 \text{ KWH}} = (+) \$ 0.03389 / \text{KWH}$$

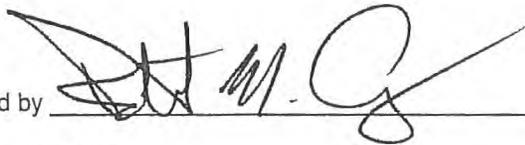
Per PSC approved Tariff Sheet No. 85.1 effective June 26, 2013. = (-) \$ 0.02892 / KWH

$$\text{FAC Factor (1)} = \underline{\underline{\$ 0.00497 / \text{KWH}}}$$

Note: (1) Five decimal places in dollars for normal rounding.

Effective Date for Billing: June 2, 2014

Submitted by



Title: Director, Rates

**KENTUCKY UTILITIES COMPANY  
FUEL COST SCHEDULE**

Expense Month : April 2014

(A) <u>Company Generation</u>			
Coal Burned	(+)	\$24,928,224	(1)
Oil Burned	(+)	444,745	(1)
Gas Burned	(+)	11,124,431	
Fuel (assigned cost during Forced Outage)	(+)	1,057,730	*
Fuel (substitute cost for Forced Outage)	(-)	720,283	*
SUB-TOTAL		\$ 36,497,401	
(B) <u>Purchases</u>			
Net energy cost - economy purchases	(+) \$	2,112,273	
Identifiable fuel cost - other purchases	(+)	-	
Identifiable fuel cost (substitute for Forced Outage)	(-)	125,278	*
Less Purchases above Highest Cost Units	(-)	-	
Internal Economy	(+)	11,540,081	
Internal Replacement	(+)	-	
SUB-TOTAL		\$ 13,652,354	
(C) <u>Inter-System Sales</u>			
Including Interchange-out	(+) \$	-	
Internal Economy	(+)	-	
Internal Replacement	(+)	30,857	
Dollars Assigned to Inter-System Sales Losses	(+)	-	
SUB-TOTAL		\$ 30,857	
(D) <u>Over or (Under) Recovery</u>			
From Page 5, Line 13		\$ (682,598)	
TOTAL FUEL RECOVERY (A+B-C-D) =		\$ 50,801,496	

Note: (1) Reflects exclusion of IMEA/IMPA portion of Trimble County Unit 2 fuel cost with recognition of 0.5% transmission losses per Commission's Order in Case No. 2012-00552.

Coal burned = \$0  
Oil burned = \$0

\* Excluded from calculations per 807 KAR 5:056 due to fuel cost for substitute generation and purchases being less than assigned cost during Forced Outage.

**KENTUCKY UTILITIES COMPANY**

**SALES SCHEDULE (KWH)**

Expense Month : April 2014

(A) Generation (Net)	(+)	1,139,244,000
Purchases including interchange-in	(+)	70,920,000
Internal Economy	(+)	384,270,000
Internal Replacement	(+)	-
SUB-TOTAL		<u>1,594,434,000</u>

(B) Inter-system Sales including interchange-out	(+)	-
Internal Economy	(+)	-
Internal Replacement	(+)	655,000
(*) System Losses	(+)	94,904,251
SUB-TOTAL		<u>95,559,251</u>

TOTAL SALES (A-B) 1,498,874,749

(\*) Note: See Page 4 of 6, "Adjustment of rolling 12-MTD average overall system losses to reflect losses"

**KENTUCKY UTILITIES COMPANY**

**ADJUSTMENT OF ROLLING 12-MTD AVERAGE OVERALL SYSTEM  
LOSSES TO REFLECT LOSSES AT RETAIL LEVEL**

Expense Month : April 2014

12 Months to Date KWH Sources:	23,483,187,000	KWH
12 MTD Overall System Losses:	1,397,771,438	KWH
April 2014 KWH Sources:	1,594,434,000	KWH
	1,397,771,438 /	23,483,187,000 = 5.952222%
	5.952222% X	1,594,434,000 = 94,904,251 KWH

**WHOLESALE KWH SALES AND LOSSES**

147,184,048	Wholesale Sales & Deliveries to ODP at Transmission Voltage	(WS-T)		
40,618,400	Wholesale sales at Primary Voltage	(WS-P)		
655,000	Intersystem Sales at Transmission Voltage	(IS-T)		
	<u>Wholesale</u>	<u>Loss</u>	<u>Wholesale</u>	
	<u>Sales\Deliveries</u>	<u>Percentage</u>	<u>Sources</u>	
WS-T:	147,184,048	2.153%	3,238,600	150,422,648
WS-P:	40,618,400	2.153% and 0.985%	1,306,719	41,925,119
IS-T:	655,000	0.5%	3,291	658,291

KENTUCKY UTILITIES COMPANY  
FUEL ADJUSTMENT CLAUSE  
OVER OR (UNDER) RECOVERY SCHEDULE

Expense Month : April 2014

1.	Last FAC Rate Billed		<u>\$0.00212</u>
2.	KWH Billed at Above Rate		<u>1,405,142,802</u>
3.	FAC Revenue/(Refund)	(Line 1 x Line 2)	<u>\$ 2,978,903</u>
4.	KWH Used to Determine Last FAC Rate		<u>1,945,308,015</u>
5.	Non-Jurisdictional KWH (Included in Line 4)		<u>258,894,789</u>
6.	Kentucky Jurisdictional KWH	(Line 4 - Line 5)	<u>1,686,413,226</u>
7.	Revised FAC Rate Billed, if prior period adjustment is needed (See Note 1)		<u>\$0.00000</u>
8.	Recoverable FAC Revenue/(Refund)	(Line 1 x Line 6)	<u>\$ 3,575,196</u>
9.	Over or (Under) Recovery	(Line 3 - Line 8)	<u>\$ (596,293)</u>
10.	Total Sales "Sm" (From Page 3 of 6)		<u>1,498,874,749</u>
11.	Kentucky Jurisdictional Sales		<u>1,309,362,105</u>
12.	Total Sales Divided by Kentucky Jurisdictional Sales (Line 10 / Line 11)		<u>1.14473662</u>
13.	Total Company Over or (Under) Recovery	(Line 9 x Line 12)	<u>\$ (682,598)</u>

**FUEL ADJUSTMENT CLAUSE  
INTERCOMPANY TRANSACTIONS**  
Expense Month : April 2014

**KENTUCKY UTILITIES COMPANY**

Purchases		KWH	
Internal Economy	\$ 11,531,821.61	384,270,000	Fuel for LGE Sale to KU for Native Load
	8,259.52		Half of Split Savings to LGE from KU
	<u>\$ 11,540,081.13</u>	<u>384,270,000</u>	
Internal Replacement	\$ -	0	Freed-up LGE Generation sold back to KU
	-	0	LGE Generation for KU Pre-Merger Sales
	<u>\$ -</u>	<u>0</u>	
Total Purchases	<u>\$ 11,540,081.13</u>	<u>384,270,000</u>	
Sales			
Internal Economy	\$ -	0	KU Fuel Cost - Sales to LGE Native Load
	-	0	Half of Split Savings
	<u>\$ -</u>	<u>0</u>	
Internal Replacement	\$ 30,857.22	655,000	Freed-up KU Generation sold back to LGE
	-	0	KU Generation for LGE Pre-Merger
	-	0	KU Generation for LGE IB
	<u>\$ 30,857.22</u>	<u>655,000</u>	
Total Sales	<u>\$ 30,857.22</u>	<u>655,000</u>	

**LOUISVILLE GAS AND ELECTRIC COMPANY**

Purchases		KWH	
Internal Economy	\$ -	0	KU Fuel Cost - Sales to LGE Native Load
	-	0	Half of Split Savings
	<u>\$ -</u>	<u>0</u>	
Internal Replacement	\$ 30,857.22	655,000	Freed-up KU Generation sold back to LGE
	-	0	KU Generation for LGE Pre-Merger
	-	0	KU Generation for LGE IB
	<u>\$ 30,857.22</u>	<u>655,000</u>	
Total Purchases	<u>\$ 30,857.22</u>	<u>655,000</u>	
Sales			
Internal Economy	\$ 11,531,821.61	384,270,000	Fuel for LGE Sale to KU for Native Load
	8,259.52	0	Half of Split Savings to LGE from KU
	<u>\$ 11,540,081.13</u>	<u>384,270,000</u>	
Internal Replacement	\$ -	0	Freed-up LGE Generation sold back to KU
	-	0	LGE Generation for KU Pre-Merger Sales
	<u>\$ -</u>	<u>0</u>	
Total Sales	<u>\$ 11,540,081.13</u>	<u>384,270,000</u>	



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COMMISSION

Jeff DeRouen, Executive Director  
Public Service Commission of Kentucky  
Attention: Ms. Chris Whelan  
211 Sower Boulevard  
P.O. Box 615  
Frankfort, Kentucky 40602

Louisville Gas and  
Electric Company  
State Regulation and Rates  
220 West Main Street  
PO Box 32010  
Louisville, Kentucky 40232  
www.lge-ku.com

Robert M. Conroy  
Director - Rates  
T 502-627-3324  
F 502-627-3213  
robert.conroy@lge-ku.com

February 21, 2014

Dear Mr. DeRouen:

In compliance with 807 KAR 5:056, Louisville Gas and Electric Company herewith files its monthly fuel adjustment factor applicable to billings under retail rates during the March 2014 billing cycle which begins March 3, 2014.

The necessary supporting data to justify the amount of the adjustment is included. Please contact me if you have any questions about this filing.

Sincerely,

Robert M. Conroy

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Enclosure

**LOUISVILLE GAS AND ELECTRIC COMPANY**  
**FUEL ADJUSTMENT CLAUSE SCHEDULE**

Expense Month : January 2014

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$$\frac{\text{Fuel "Fm" (Fuel Cost Schedule)}}{\text{Sales "Sm" (Sales Schedule)}} = \frac{\$31,111,245}{1,056,322,322 \text{ KWH}} = (+) \$ 0.02945 / \text{KWH}$$

$$\text{Per PSC approved Tariff Sheet No. 85.1 effective June 26, 2013} = (-) \$ 0.02725 / \text{KWH}$$

$$\text{FAC Factor (1)} = \underline{\underline{\$ 0.00220 / \text{KWH}}}$$

Note: (1) Five decimal places in dollars for normal rounding.

Effective Date for Billing: March 3, 2014

Submitted by 

Title: Director, Rates

**LOUISVILLE GAS AND ELECTRIC COMPANY  
FUEL COST SCHEDULE**

Expense Month : January 2014

<u>(A) Company Generation</u>		
Coal Burned	(+) \$	36,355,139 (1)
Oil Burned	(+)	109,797 (1)
Gas Burned	(+)	7,450,040
Fuel (assigned cost during Forced Outage)	(+)	774,078 *
Fuel (substitute cost for Forced Outage)	(-)	762,818 *
SUB-TOTAL	\$	<u>43,914,976</u>
<u>(B) Purchases</u>		
Net energy cost - economy purchases	(+) \$	1,803,254
Identifiable fuel cost - other purchases	(+)	-
Identifiable fuel cost (substitute for Forced Outage)	(-)	5,772 *
Less Purchases Above Highest Cost Units	(-)	-
Internal Economy	(+)	-
Internal Replacement	(+)	2,720,537
SUB-TOTAL	\$	<u>4,523,791</u>
<u>(C) Inter-System Sales</u>		
Including Interchange-out	(+) \$	3,925,186
Internal Economy	(+)	13,353,519
Internal Replacement	(+)	-
Dollars Assigned to Inter-System Sales Losses	(+)	19,626
SUB-TOTAL	\$	<u>17,298,331</u>
<u>(D) Over or (Under) Recovery</u>		
From Page 4, Line 13	\$	29,191
TOTAL FUEL RECOVERY (A+B-C-D) =	\$	<u><u>31,111,245</u></u>

Notes: (1) Reflects exclusion of IMEA/IMPA portion of Trimble County fuel cost with recognition of 0.5% transmission losses per Commission's Order in Case No. 2012-00553.

Coal burned = \$4,762  
Oil burned = \$72

\* Excluded from calculations per 807 KAR 5:056 due to fuel cost for substitute generation and purchases being less than assigned cost during Forced Outage.

LOUISVILLE GAS AND ELECTRIC COMPANY

SALES SCHEDULE (KWH)

Expense Month : January 2014

(A) Generation (Net)	(+)	1,547,908,000
Purchases including interchange-in	(+)	33,779,000
Internal Economy	(+)	-
Internal Replacement	(+)	54,875,000
SUB-TOTAL		<u>1,636,562,000</u>

(B) Inter-system Sales including interchange-out	(+)	87,467,000
Internal Economy	(+)	447,497,000
Internal Replacement	(+)	-
System Losses ( 1,101,598,000 KWH times 4.11% )	(+)	45,275,678
SUB-TOTAL		<u>580,239,678</u>

TOTAL SALES (A-B) 1,056,322,322

LOUISVILLE GAS AND ELECTRIC COMPANY

FUEL ADJUSTMENT CLAUSE  
OVER OR (UNDER) RECOVERY SCHEDULE

Expense Month : January 2014

1.	Last FAC Rate Billed		0.00014
2.	KWH Billed at Above Rate		<u>1,063,423,436</u>
3.	FAC Revenue/(Refund)	(Line 1 x Line 2)	<u>\$ 148,879</u>
4.	KWH Used to Determine Last FAC Rate		854,911,099
5.	Non-Jurisdictional KWH (Included in Line 4)		<u>0</u>
6.	Kentucky Jurisdictional KWH	(Line 4 - Line 5)	<u>854,911,099</u>
7.	Revised FAC Rate Billed, if prior period adjustment is needed (See Note 1)		-
8.	Recoverable FAC Revenue/(Refund)	(Line 1 x Line 6)	<u>\$ 119,688</u>
9.	Over or (Under) Recovery	(Line 3 - Line 8)	<u>\$ 29,191</u>
10.	Total Sales "Sm" (From Page 3 of 5)		<u>1,056,322,322</u>
11.	Kentucky Jurisdictional Sales		<u>1,056,322,322</u>
12.	Total Sales Divided by Kentucky Jurisdictional Sales	(Line 10 / Line 11)	<u>1.00000000</u>
13.	Total Company Over or (Under) Recovery	(Line 9 x Line 12)	<u>\$ 29,191</u> To Page 2, Line D

**FUEL ADJUSTMENT CLAUSE  
INTERCOMPANY TRANSACTIONS**  
Expense Month : January 2014

**LOUISVILLE GAS AND ELECTRIC COMPANY**

		KWH	
<b>Purchases</b>			
Internal Economy	\$ -	0	KU Fuel Cost - Sales to LGE Native Load Half of Split Savings
	<u>\$ -</u>	<u>0</u>	
Internal Replacement	\$ 2,720,537.02	54,875,000	Freed-up KU Generation sold back to LGE
	-	0	KU Generation for LGE Pre-Merger
	-	0	KU Generation for LGE IB
	<u>\$ 2,720,537.02</u>	<u>54,875,000</u>	
<b>Total Purchases</b>	<u><u>\$ 2,720,537.02</u></u>	<u><u>54,875,000</u></u>	
<b>Sales</b>			
Internal Economy	\$ 12,610,206.67	447,497,000	Fuel for LGE Sale to KU for Native Load Half of Split Savings to LGE from KU
	743,312.79		
	<u>\$ 13,353,519.46</u>	<u>447,497,000</u>	
Internal Replacement	\$ -	0	Freed-up LGE Generation sold back to KU
	-	0	LGE Generation for KU Pre-Merger Sales
	<u>\$ -</u>	<u>0</u>	
<b>Total Sales</b>	<u><u>\$ 13,353,519.46</u></u>	<u><u>447,497,000</u></u>	

**KENTUCKY UTILITIES COMPANY**

		KWH	
<b>Purchases</b>			
Internal Economy	\$ 12,610,206.67	447,497,000	Fuel for LGE Sale to KU for Native Load Half of Split Savings to LGE from KU
	743,312.79		
	<u>\$ 13,353,519.46</u>	<u>447,497,000</u>	
Internal Replacement	\$ -	0	Freed-up LGE Generation sold back to KU
	-	0	LGE Generation for KU Pre-Merger Sales
	<u>\$ -</u>	<u>0</u>	
<b>Total Purchases</b>	<u><u>\$ 13,353,519.46</u></u>	<u><u>447,497,000</u></u>	
<b>Sales</b>			
Internal Economy	\$ -	0	KU Fuel Cost - Sales to LGE Native Load Half of Split Savings
	-	0	
	<u>\$ -</u>	<u>0</u>	
Internal Replacement	\$ 2,720,537.02	54,875,000	Freed-up KU Generation sold back to LGE
	-	0	KU Generation for LGE Pre-Merger
	-	0	KU Generation for LGE IB
	<u>\$ 2,720,537.02</u>	<u>54,875,000</u>	
<b>Total Sales</b>	<u><u>\$ 2,720,537.02</u></u>	<u><u>54,875,000</u></u>	

FA. Whelan.



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MAR 21 2014

PUBLIC SERVICE  
COMMISSION

Jeff DeRouen, Executive Director  
Public Service Commission of Kentucky  
Attention: Ms. Chris Whelan  
211 Sower Boulevard  
P.O. Box 615  
Frankfort, Kentucky 40602

Louisville Gas and  
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Robert M. Conroy  
Director - Rates  
T 502-627-3324  
F 502-627-3213  
robert.conroy@lge-ku.com

March 21, 2014

Dear Mr. DeRouen:

In compliance with 807 KAR 5:056, Louisville Gas and Electric Company herewith files its monthly fuel adjustment factor applicable to billings under retail rates during the April 2014 billing cycle which begins April 1, 2014.

The necessary supporting data to justify the amount of the adjustment is included. Please contact me if you have any questions about this filing.

Sincerely,

Robert M. Conroy

Enclosure

MAR 24 2014

**LOUISVILLE GAS AND ELECTRIC COMPANY**  
**FUEL ADJUSTMENT CLAUSE SCHEDULE**

Expense Month : February 2014

$$\begin{array}{r} \text{Fuel "Fm" (Fuel Cost Schedule)} \\ \hline \end{array} = \frac{\$25,865,627}{\begin{array}{r} \text{Sales "Sm" (Sales Schedule)} \\ \hline \end{array}} = (+) \$ \text{ 0.02874 / KWH}$$

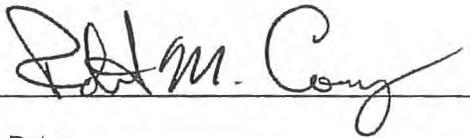
900,019,136 KWH

Per PSC approved Tariff Sheet No. 85.1 effective June 26, 2013 = (-) \$ 0.02725 / KWH

FAC Factor (1) = \$ 0.00149 / KWH

Note: (1) Five decimal places in dollars for normal rounding.

Effective Date for Billing: April 1, 2014

Submitted by 

Title: Director, Rates

**LOUISVILLE GAS AND ELECTRIC COMPANY  
FUEL COST SCHEDULE**

Expense Month : February 2014

(A) <u>Company Generation</u>		
Coal Burned	(+) \$	31,777,557 (1)
Oil Burned	(+)	21,653 (1)
Gas Burned	(+)	5,524,550
Fuel (assigned cost during Forced Outage)	(+)	428,429
Fuel (substitute cost for Forced Outage)	(-)	463,744
SUB-TOTAL	\$	<u>37,288,445</u>
(B) <u>Purchases</u>		
Net energy cost - economy purchases	(+) \$	1,563,155
Identifiable fuel cost - other purchases	(+)	-
Identifiable fuel cost (substitute for Forced Outage)	(-)	67
Less Purchases Above Highest Cost Units	(-)	-
Internal Economy	(+)	-
Internal Replacement	(+)	1,653,610
SUB-TOTAL	\$	<u>3,216,698</u>
(C) <u>Inter-System Sales</u>		
Including Interchange-out	(+) \$	2,896,148
Internal Economy	(+)	11,631,949
Internal Replacement	(+)	-
Dollars Assigned to Inter-System Sales Losses	(+)	14,481
SUB-TOTAL	\$	<u>14,542,578</u>
(D) <u>Over or (Under) Recovery</u>		
From Page 4, Line 13	\$	96,938
TOTAL FUEL RECOVERY (A+B-C-D) =	\$	<u><u>25,865,627</u></u>

Notes: (1) Reflects exclusion of IMEA/IMPA portion of Trimble County fuel cost with recognition of 0.5% transmission losses per Commission's Order in Case No. 2012-00553.

Coal burned = \$4,006  
Oil burned = \$13

**LOUISVILLE GAS AND ELECTRIC COMPANY**

**SALES SCHEDULE (KWH)**

Expense Month : February 2014

(A) Generation (Net)		(+)	1,332,912,000
Purchases including interchange-in		(+)	47,871,000
Internal Economy		(+)	-
Internal Replacement		(+)	39,368,000
SUB-TOTAL			<u>1,420,151,000</u>
(B) Inter-system Sales including interchange-out		(+)	76,931,000
Internal Economy		(+)	405,407,000
Internal Replacement		(+)	-
System Losses ( 937,813,000 KWH times 4.03% )		(+)	37,793,864
SUB-TOTAL			<u>520,131,864</u>
TOTAL SALES (A-B)			<u><u>900,019,136</u></u>

LOUISVILLE GAS AND ELECTRIC COMPANY

FUEL ADJUSTMENT CLAUSE  
OVER OR (UNDER) RECOVERY SCHEDULE

Expense Month : February 2014

1.	Last FAC Rate Billed		0.00161
2.	KWH Billed at Above Rate		<u>1,037,887,681</u>
3.	FAC Revenue/(Refund)	(Line 1 x Line 2)	<u>\$ 1,670,999</u>
4.	KWH Used to Determine Last FAC Rate		977,677,650
5.	Non-Jurisdictional KWH (Included in Line 4)		<u>0</u>
6.	Kentucky Jurisdictional KWH	(Line 4 - Line 5)	<u>977,677,650</u>
7.	Revised FAC Rate Billed, if prior period adjustment is needed (See Note 1)		-
8.	Recoverable FAC Revenue/(Refund)	(Line 1 x Line 6)	<u>\$ 1,574,061</u>
9.	Over or (Under) Recovery	(Line 3 - Line 8)	<u>\$ 96,938</u>
10.	Total Sales "Sm" (From Page 3 of 5)		<u>900,019,136</u>
11.	Kentucky Jurisdictional Sales		<u>900,019,136</u>
12.	Total Sales Divided by Kentucky Jurisdictional Sales	(Line 10 / Line 11)	<u>1.00000000</u>
13.	Total Company Over or (Under) Recovery	(Line 9 x Line 12)	<u>\$ 96,938</u> To Page 2, Line D

**FUEL ADJUSTMENT CLAUSE  
INTERCOMPANY TRANSACTIONS**  
Expense Month : February 2014

**LOUISVILLE GAS AND ELECTRIC COMPANY**

		KWH	
<b>Purchases</b>			
Internal Economy	\$ -	0	KU Fuel Cost - Sales to LGE Native Load Half of Split Savings
	<u>\$ -</u>	<u>0</u>	
Internal Replacement	\$ 1,653,609.72	39,368,000	Freed-up KU Generation sold back to LGE
	-	0	KU Generation for LGE Pre-Merger
	-	0	KU Generation for LGE IB
	<u>\$ 1,653,609.72</u>	<u>39,368,000</u>	
<b>Total Purchases</b>	<u><u>\$ 1,653,609.72</u></u>	<u><u>39,368,000</u></u>	
<b>Sales</b>			
Internal Economy	\$ 11,263,655.77	405,407,000	Fuel for LGE Sale to KU for Native Load Half of Split Savings to LGE from KU
	368,293.64		
	<u>\$ 11,631,949.41</u>	<u>405,407,000</u>	
Internal Replacement	\$ -	0	Freed-up LGE Generation sold back to KU
	-	0	LGE Generation for KU Pre-Merger Sales
	<u>\$ -</u>	<u>0</u>	
<b>Total Sales</b>	<u><u>\$ 11,631,949.41</u></u>	<u><u>405,407,000</u></u>	

**KENTUCKY UTILITIES COMPANY**

		KWH	
<b>Purchases</b>			
Internal Economy	\$ 11,263,655.77	405,407,000	Fuel for LGE Sale to KU for Native Load Half of Split Savings to LGE from KU
	368,293.64		
	<u>\$ 11,631,949.41</u>	<u>405,407,000</u>	
Internal Replacement	\$ -	0	Freed-up LGE Generation sold back to KU
	-	0	LGE Generation for KU Pre-Merger Sales
	<u>\$ -</u>	<u>0</u>	
<b>Total Purchases</b>	<u><u>\$ 11,631,949.41</u></u>	<u><u>405,407,000</u></u>	
<b>Sales</b>			
Internal Economy	\$ -	0	KU Fuel Cost - Sales to LGE Native Load Half of Split Savings
	<u>\$ -</u>	<u>0</u>	
Internal Replacement	\$ 1,653,609.72	39,368,000	Freed-up KU Generation sold back to LGE
	-	0	KU Generation for LGE Pre-Merger
	-	0	KU Generation for LGE IB
	<u>\$ 1,653,609.72</u>	<u>39,368,000</u>	
<b>Total Sales</b>	<u><u>\$ 1,653,609.72</u></u>	<u><u>39,368,000</u></u>	

FA



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COMMISSION

Jeff DeRouen, Executive Director  
Public Service Commission of Kentucky  
Attention: Ms. Chris Whelan  
211 Sower Boulevard  
P.O. Box 615  
Frankfort, Kentucky 40602

Louisville Gas and  
Electric Company  
State Regulation and Rates  
220 West Main Street  
PO Box 32010  
Louisville, Kentucky 40232  
www.lge-ku.com

Robert M. Conroy  
Director - Rates  
T 502-627-3324  
F 502-627-3213  
robert.conroy@lge-ku.com

April 21, 2014

Dear Mr. DeRouen:

In compliance with 807 KAR 5:056, Louisville Gas and Electric Company herewith files its monthly fuel adjustment factor applicable to billings under retail rates during the May 2014 billing cycle which begins May 1, 2014.

The necessary supporting data to justify the amount of the adjustment is included. Please contact me if you have any questions about this filing.

Sincerely,

Robert M. Conroy

Enclosure

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LOUISVILLE GAS AND ELECTRIC COMPANY  
FUEL ADJUSTMENT CLAUSE SCHEDULE

Expense Month : March 2014

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$$\frac{\text{Fuel "Fm" (Fuel Cost Schedule)}}{\text{Sales "Sm" (Sales Schedule)}} = \frac{\$25,825,990}{895,334,910 \text{ KWH}} = (+) \$ 0.02885 / \text{KWH}$$

$$\text{Per PSC approved Tariff Sheet No. 85.1 effective June 26, 2013} = (-) \$ 0.02725 / \text{KWH}$$

$$\text{FAC Factor (1)} = \underline{\underline{\$ 0.00160}} / \text{KWH}$$

Note: (1) Five decimal places in dollars for normal rounding.

Effective Date for Billing: May 1, 2014

Submitted by   
Title: Director, Rates

**LOUISVILLE GAS AND ELECTRIC COMPANY  
FUEL COST SCHEDULE**

Expense Month : March 2014

(A) <u>Company Generation</u>		
Coal Burned	(+) \$	31,920,674 (1)
Oil Burned	(+)	29,250 (1)
Gas Burned	(+)	4,812,972
Fuel (assigned cost during Forced Outage)	(+)	225,711
Fuel (substitute cost for Forced Outage)	(-)	239,827
SUB-TOTAL	\$	36,748,780
(B) <u>Purchases</u>		
Net energy cost - economy purchases	(+) \$	1,494,866
Identifiable fuel cost - other purchases	(+)	-
Identifiable fuel cost (substitute for Forced Outage)	(-)	-
Less Purchases Above Highest Cost Units	(-)	-
Internal Economy	(+)	-
Internal Replacement	(+)	1,331,515
SUB-TOTAL	\$	2,826,381
(C) <u>Inter-System Sales</u>		
Including Interchange-out	(+) \$	2,199,568
Internal Economy	(+)	11,932,840
Internal Replacement	(+)	-
Dollars Assigned to Inter-System Sales Losses	(+)	10,998
SUB-TOTAL	\$	14,143,406
(D) <u>Over or (Under) Recovery</u>		
From Page 4, Line 13	\$	(394,235)
TOTAL FUEL RECOVERY (A+B-C-D) =		\$ 25,825,990

Notes: (1) Reflects exclusion of IMEA/IMPA portion of Trimble County fuel cost with recognition of 0.5% transmission losses per Commission's Order in Case No. 2012-00553.

Coal burned = \$4,191  
Oil burned = \$20

**LOUISVILLE GAS AND ELECTRIC COMPANY**

**SALES SCHEDULE (KWH)**

Expense Month : March 2014

(A) Generation (Net)		(+)	1,323,912,000
Purchases including interchange-in		(+)	54,011,000
Internal Economy		(+)	-
Internal Replacement		(+)	28,961,000
SUB-TOTAL			<u>1,406,884,000</u>
(B) Inter-system Sales including interchange-out		(+)	53,465,000
Internal Economy		(+)	421,652,000
Internal Replacement		(+)	-
System Losses ( 931,767,000 KWH times 3.91% )		(+)	36,432,090
SUB-TOTAL			<u>511,549,090</u>
			<u>TOTAL SALES (A-B)</u>
			<u>895,334,910</u>

LOUISVILLE GAS AND ELECTRIC COMPANY

FUEL ADJUSTMENT CLAUSE  
OVER OR (UNDER) RECOVERY SCHEDULE

Expense Month : March 2014

1.	Last FAC Rate Billed		0.00220
2.	KWH Billed at Above Rate		<u>877,124,753</u>
3.	FAC Revenue/(Refund)	(Line 1 x Line 2)	<u>\$ 1,929,674</u>
4.	KWH Used to Determine Last FAC Rate		1,056,322,322
5.	Non-Jurisdictional KWH (Included in Line 4)		<u>0</u>
6.	Kentucky Jurisdictional KWH	(Line 4 - Line 5)	<u>1,056,322,322</u>
7.	Revised FAC Rate Billed, if prior period adjustment is needed (See Note 1)		-
8.	Recoverable FAC Revenue/(Refund)	(Line 1 x Line 6)	<u>\$ 2,323,909</u>
9.	Over or (Under) Recovery	(Line 3 - Line 8)	<u>\$ (394,235)</u>
10.	Total Sales "Sm" (From Page 3 of 5)		<u>895,334,910</u>
11.	Kentucky Jurisdictional Sales		<u>895,334,910</u>
12.	Total Sales Divided by Kentucky Jurisdictional Sales	(Line 10 / Line 11)	<u>1.00000000</u>
13.	Total Company Over or (Under) Recovery	(Line 9 x Line 12)	<u>\$ (394,235)</u> To Page 2, Line D

**FUEL ADJUSTMENT CLAUSE  
INTERCOMPANY TRANSACTIONS**  
Expense Month : March 2014

**LOUISVILLE GAS AND ELECTRIC COMPANY**

		KWH	
<b>Purchases</b>			
Internal Economy	\$ -	0	KU Fuel Cost - Sales to LGE Native Load
	-	-	Half of Split Savings
	<u>\$ -</u>	<u>0</u>	
Internal Replacement	\$ 1,331,515.43	28,961,000	Freed-up KU Generation sold back to LGE
	-	0	KU Generation for LGE Pre-Merger
	-	0	KU Generation for LGE IB
	<u>\$ 1,331,515.43</u>	<u>28,961,000</u>	
<b>Total Purchases</b>	<u><u>\$ 1,331,515.43</u></u>	<u><u>28,961,000</u></u>	
<b>Sales</b>			
Internal Economy	\$ 11,609,548.57	421,652,000	Fuel for LGE Sale to KU for Native Load
	323,291.36	-	Half of Split Savings to LGE from KU
	<u>\$ 11,932,839.93</u>	<u>421,652,000</u>	
Internal Replacement	\$ -	0	Freed-up LGE Generation sold back to KU
	-	0	LGE Generation for KU Pre-Merger Sales
	<u>\$ -</u>	<u>0</u>	
<b>Total Sales</b>	<u><u>\$ 11,932,839.93</u></u>	<u><u>421,652,000</u></u>	

**KENTUCKY UTILITIES COMPANY**

		KWH	
<b>Purchases</b>			
Internal Economy	\$ 11,609,548.57	421,652,000	Fuel for LGE Sale to KU for Native Load
	323,291.36	-	Half of Split Savings to LGE from KU
	<u>\$ 11,932,839.93</u>	<u>421,652,000</u>	
Internal Replacement	\$ -	0	Freed-up LGE Generation sold back to KU
	-	0	LGE Generation for KU Pre-Merger Sales
	<u>\$ -</u>	<u>0</u>	
<b>Total Purchases</b>	<u><u>\$ 11,932,839.93</u></u>	<u><u>421,652,000</u></u>	
<b>Sales</b>			
Internal Economy	\$ -	0	KU Fuel Cost - Sales to LGE Native Load
	-	-	Half of Split Savings
	<u>\$ -</u>	<u>0</u>	
Internal Replacement	\$ 1,331,515.43	28,961,000	Freed-up KU Generation sold back to LGE
	-	0	KU Generation for LGE Pre-Merger
	-	0	KU Generation for LGE IB
	<u>\$ 1,331,515.43</u>	<u>28,961,000</u>	
<b>Total Sales</b>	<u><u>\$ 1,331,515.43</u></u>	<u><u>28,961,000</u></u>	

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COMMISSION

Louisville Gas and  
Electric Company  
State Regulation and Rates  
220 West Main Street  
PO Box 32010  
Louisville, Kentucky 40232  
www.lge-ku.com

Robert M. Conroy  
Director - Rates  
T 502-627-3324  
F 502-627-3213  
robert.conroy@lge-ku.com

Jeff DeRouen, Executive Director  
Public Service Commission of Kentucky  
Attention: Ms. Chris Whelan  
211 Sower Boulevard  
P.O. Box 615  
Frankfort, Kentucky 40602

May 23, 2014

Dear Mr. DeRouen:

In compliance with 807 KAR 5:056, Louisville Gas and Electric Company herewith files its monthly fuel adjustment factor applicable to billings under retail rates during the June 2014 billing cycle which begins June 2, 2014.

The necessary supporting data to justify the amount of the adjustment is included. Please contact me if you have any questions about this filing.

Sincerely,

Robert M. Conroy

Enclosure

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**LOUISVILLE GAS AND ELECTRIC COMPANY**

**FUEL ADJUSTMENT CLAUSE SCHEDULE**

Expense Month : April 2014

$$\begin{array}{r} \text{Fuel "Fm" (Fuel Cost Schedule)} \\ \hline \end{array} = \begin{array}{r} \$24,879,280 \\ \hline \end{array} = (+) \$ \text{ 0.03042 / KWH}$$
$$\begin{array}{r} \text{Sales "Sm" (Sales Schedule)} \\ \hline \end{array} = \begin{array}{r} 817,735,596 \text{ KWH} \\ \hline \end{array}$$

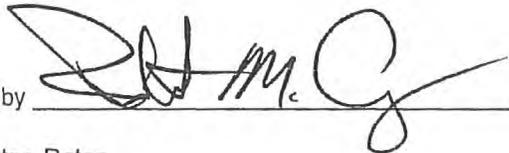
Per PSC approved Tariff Sheet No. 85.1 effective June 26, 2013 = (-) \$ 0.02725 / KWH

FAC Factor (1) = \$ 0.00317 / KWH

Note: (1) Five decimal places in dollars for normal rounding.

Effective Date for Billing: June 2, 2014

Submitted by



Title: Director, Rates

**LOUISVILLE GAS AND ELECTRIC COMPANY  
FUEL COST SCHEDULE**

Expense Month : April 2014

<u>(A) Company Generation</u>		
Coal Burned	(+) \$	27,678,095 (1)
Oil Burned	(+)	101,825 (1)
Gas Burned	(+)	7,542,276
Fuel (assigned cost during Forced Outage)	(+)	2,016,942
Fuel (substitute cost for Forced Outage)	(-)	2,124,484
SUB-TOTAL	\$	35,214,654
<u>(B) Purchases</u>		
Net energy cost - economy purchases	(+) \$	1,213,397
Identifiable fuel cost - other purchases	(+)	-
Identifiable fuel cost (substitute for Forced Outage)	(-)	113,576
Less Purchases Above Highest Cost Units	(-)	-
Internal Economy	(+)	-
Internal Replacement	(+)	30,857
SUB-TOTAL	\$	1,130,678
<u>(C) Inter-System Sales</u>		
Including Interchange-out	(+) \$	54,998
Internal Economy	(+)	11,540,081
Internal Replacement	(+)	-
Dollars Assigned to Inter-System Sales Losses	(+)	275
SUB-TOTAL	\$	11,595,354
<u>(D) Over or (Under) Recovery</u>		
From Page 4, Line 13	\$	(129,302)
TOTAL FUEL RECOVERY (A+B-C-D) =		\$ 24,879,280

Notes: (1) Reflects exclusion of IMEA/IMPA portion of Trimble County fuel cost with recognition of 0.5% transmission losses per Commission's Order in Case No. 2012-00553.

Coal burned = \$3,912  
Oil burned = \$68

**LOUISVILLE GAS AND ELECTRIC COMPANY**

**SALES SCHEDULE (KWH)**

Expense Month : April 2014

(A) Generation (Net)	(+)	1,194,293,000
Purchases including interchange-in	(+)	40,221,000
Internal Economy	(+)	-
Internal Replacement	(+)	655,000
SUB-TOTAL		<u>1,235,169,000</u>
(B) Inter-system Sales including interchange-out	(+)	1,127,000
Internal Economy	(+)	384,270,000
Internal Replacement	(+)	-
System Losses ( 849,772,000 KWH times 3.77% )	(+)	32,036,404
SUB-TOTAL		<u>417,433,404</u>
TOTAL SALES (A-B)		<u>817,735,596</u>

LOUISVILLE GAS AND ELECTRIC COMPANY

FUEL ADJUSTMENT CLAUSE  
OVER OR (UNDER) RECOVERY SCHEDULE

Expense Month : April 2014

1.	Last FAC Rate Billed		0.00149
2.	KWH Billed at Above Rate		<u>813,239,332</u>
3.	FAC Revenue/(Refund)	(Line 1 x Line 2)	<u>\$ 1,211,727</u>
4.	KWH Used to Determine Last FAC Rate		900,019,136
5.	Non-Jurisdictional KWH (Included in Line 4)		<u>0</u>
6.	Kentucky Jurisdictional KWH	(Line 4 - Line 5)	<u>900,019,136</u>
7.	Revised FAC Rate Billed, if prior period adjustment is needed (See Note 1)		-
8.	Recoverable FAC Revenue/(Refund)	(Line 1 x Line 6)	<u>\$ 1,341,029</u>
9.	Over or (Under) Recovery	(Line 3 - Line 8)	<u>\$ (129,302)</u>
10.	Total Sales "Sm" (From Page 3 of 5)		<u>817,735,596</u>
11.	Kentucky Jurisdictional Sales		<u>817,735,596</u>
12.	Total Sales Divided by Kentucky Jurisdictional Sales	(Line 10 / Line 11)	<u>1.00000000</u>
13.	Total Company Over or (Under) Recovery	(Line 9 x Line 12)	<u>\$ (129,302)</u> To Page 2, Line D

**FUEL ADJUSTMENT CLAUSE  
INTERCOMPANY TRANSACTIONS**  
Expense Month : April 2014

**LOUISVILLE GAS AND ELECTRIC COMPANY**

		KWH	
<b>Purchases</b>			
Internal Economy	\$ -	0	KU Fuel Cost - Sales to LGE Native Load
	-	-	Half of Split Savings
	<u>\$ -</u>	<u>0</u>	
Internal Replacement	\$ 30,857.22	655,000	Freed-up KU Generation sold back to LGE
	-	0	KU Generation for LGE Pre-Merger
	-	0	KU Generation for LGE IB
	<u>\$ 30,857.22</u>	<u>655,000</u>	
<b>Total Purchases</b>	<u><u>\$ 30,857.22</u></u>	<u><u>655,000</u></u>	
<b>Sales</b>			
Internal Economy	\$ 11,531,821.61	384,270,000	Fuel for LGE Sale to KU for Native Load
	8,259.52	-	Half of Split Savings to LGE from KU
	<u>\$ 11,540,081.13</u>	<u>384,270,000</u>	
Internal Replacement	\$ -	0	Freed-up LGE Generation sold back to KU
	-	0	LGE Generation for KU Pre-Merger Sales
	<u>\$ -</u>	<u>0</u>	
<b>Total Sales</b>	<u><u>\$ 11,540,081.13</u></u>	<u><u>384,270,000</u></u>	

**KENTUCKY UTILITIES COMPANY**

		KWH	
<b>Purchases</b>			
Internal Economy	\$ 11,531,821.61	384,270,000	Fuel for LGE Sale to KU for Native Load
	8,259.52	-	Half of Split Savings to LGE from KU
	<u>\$ 11,540,081.13</u>	<u>384,270,000</u>	
Internal Replacement	\$ -	0	Freed-up LGE Generation sold back to KU
	-	0	LGE Generation for KU Pre-Merger Sales
	<u>\$ -</u>	<u>0</u>	
<b>Total Purchases</b>	<u><u>\$ 11,540,081.13</u></u>	<u><u>384,270,000</u></u>	
<b>Sales</b>			
Internal Economy	\$ -	0	KU Fuel Cost - Sales to LGE Native Load
	-	-	Half of Split Savings
	<u>\$ -</u>	<u>0</u>	
Internal Replacement	\$ 30,857.22	655,000	Freed-up KU Generation sold back to LGE
	-	0	KU Generation for LGE Pre-Merger
	-	0	KU Generation for LGE IB
	<u>\$ 30,857.22</u>	<u>655,000</u>	
<b>Total Sales</b>	<u><u>\$ 30,857.22</u></u>	<u><u>655,000</u></u>	