

Goss ■ Samford PLLC



Attorneys at Law

May 4, 2015

VIA HAND DELIVERY

Mr. Jeff Derouen
Executive Director
Kentucky Public Service Commission
P.O. Box 615
Frankfort, Kentucky 40602

RECEIVED

MAY 04 2015

PUBLIC SERVICE
COMMISSION

RE: Case No. 2014-00292

Dear Mr. Derouen:

On April 3, 2015, pursuant to the Commission's March 30, 2015 Orders concerning requests for confidential treatment, East Kentucky Power Cooperative, Inc. ("EKPC") filed one original and ten copies of revised pages reflecting as unredacted the information that had been denied confidential treatment. EKPC noted in the April 3, 2015 filing that it would be seeking formal reconsideration of the Commission's denial of confidential treatment of the fuel cost component of this proposal. Until that matter was resolved, all document references to the fuel cost component were redacted on the pages filed on April 3, 2015.

Pursuant to KRS 278.400, on April 9, 2015 EKPC filed a Petition for Rehearing concerning the denial of confidential treatment of the fuel cost component. On April 27, 2015 the Commission denied rehearing. Therefore, please find one original and ten copies of EKPC's revised pages reflecting as unredacted the information for which rehearing was denied.

Please note the information is from certain portions of EKPC's original application, certain responses to Commission Staff's First Request for Information dated October 9, 2014, and certain responses to the Commission Staff's Second Request for Information dated November 10, 2014 in the above referenced case. In addition, the enclosed pages reflect the redaction of those items that the Commission granted confidential treatment on March 30, 2015.

If you have any questions or require additional information, please contact me.

Very truly yours,

David S. Samford

Enclosures

cc: Parties of Record

Case No. 2014-00292 – Glasgow LFGTE Project
Application – August 21, 2014 Motion for Confidential Treatment

Exhibit 6, pages 2 through 6 [Redaction reflects Confidential from March 30, 2015 Order]

Exhibit 9, page 1

Exhibit 13, page 6

FRECC Capacity Charge Calculation

Fuel Price (\$/mmBtu)	1.50						
EKPC Finance Rate	0.045						
TIER	1.500						
Year	2014	2015	2016	2017	2018	2019	2020
Generator Output (CAT G3516 A+) (kW)	1000						
Heat Rate (Btu/kWh) (HHV)	10,750						
Capacity factor	0.90						
Gross generation (kWh)	7,884,000						
Station Service	0.05						
Net generation (kWh)	7,489,800						
EKPC LFGTE Capital Investment (\$)	2,898,892	2,802,262	2,705,633	2,609,003	2,512,373	2,415,743	2,319,114
Depreciation Expense	30	96,630	96,630	96,630	96,630	96,630	96,630
Interest Expense		129,493	127,345	125,098	122,748	120,289	117,718
Fuel Cost (\$)	121,000	121,000	123,420	125,888	128,406	130,974	133,594
O&M Cost (\$)		148,000	151,700	188,062	159,380	163,364	334,897
Int Rate * TIER * NBV		189,153	182,630	176,108	169,585	163,063	156,540
O&M + Depr Exp + (Int Rate * TIER * NBV)		433,782	430,960	460,799	425,595	423,057	588,067
Capacity Charge (\$/kW-month)		36.15	35.91	38.40	35.47	35.25	49.01
6-year average Capacity Charge to FRECC (\$/kW-month)		38.36					
FRECC COE (\$/MWh)		74.07	74.02	78.33	73.97	73.97	96.35
FRECC COE 6-year average (\$/MWh)		78.45	78.45	78.46	78.61	78.67	78.75
2013 Financial Forecast Cost to Members (\$/MWh)							
2013 Financial Forecast Cost to Members 6-year average (\$/MWh)							
Demand Charge West Glasgow Substation (\$/kW-month)	6.02	72,240	72,240	72,240	72,240	72,240	72,240
Actual FRECC COE (capacity charge less demand charge savings)		64.43	64.37	68.69	64.32	64.33	86.71
Actual FRECC COE (capacity charge less demand charge savings) 6-year average		68.81					
REC Value (\$/REC "\$/MWh")	15	112,347	112,347	112,347	112,347	112,347	112,347
Actual FRECC COE (capacity charge less demand charge savings less REC value)		49.43	49.37	53.69	49.32	49.33	71.71
Actual FRECC COE (capacity charge less demand charge savings less REC value) 6-year average		53.81					

FRECC Capacity Charge Calculation

	2021	2022	2023	2024	2025	2026
Fuel Price (\$/mmBtu)						
EKPC Finance Rate						
TIER						
Year						
Generator Output (CAT G3516 A+) (kW)						
Heat Rate (Btu/kWh) (HHV)						
Capacity factor						
Gross generation (kWh)						
Station Service						
Net generation (kWh)						
EKPC LFGTE Capital Investment (\$)	2,222,484	2,125,854	2,029,224	1,932,595	1,835,965	1,739,335
Depreciation Expense	96,630	96,630	96,630	96,630	96,630	96,630
Interest Expense	115,029	112,216	109,274	106,196	102,978	99,611
Fuel Cost (\$)	136,266	138,991	141,771	144,606	147,498	150,448
O&M Cost (\$)	171,635	175,925	218,094	184,832	189,453	388,378
Int Rate * TIER * NBV	150,018	143,495	136,973	130,450	123,928	117,405
O&M + Depr Exp + (Int Rate * TIER * NBV)	418,282	416,050	451,696	411,912	410,010	602,413
Capacity Charge (\$/kW-month)	34.86	34.67	37.64	34.33	34.17	50.20
6-year average Capacity Charge to FRECC (\$/kW-month)	37.64					
FRECC COE (\$/MWh)	74.04	74.11	79.24	74.30	74.44	100.52
FRECC COE 6-year average (\$/MWh)	79.44	79.56	79.71	80.01	80.20	80.42
2013 Financial Forecast Cost to Members (\$/MWh)						
2013 Financial Forecast Cost to Members 6-year average (\$/MWh)						
Demand Charge West Glasgow Substation (\$/kW-month)	72,240	72,240	72,240	72,240	72,240	72,240
Actual FRECC COE (capacity charge less demand charge savings)	64.40	64.46	69.59	64.66	64.79	90.87
Actual FRECC COE (capacity charge less demand charge savings) 6-year average	69.79					
REC Value (\$/REC "\$/MWh")	112,347	112,347	112,347	112,347	112,347	112,347
Actual FRECC COE (capacity charge less demand charge savings less REC value)	49.40	49.46	54.59	49.66	49.79	75.87
Actual FRECC COE (capacity charge less demand charge savings less REC value) 6-year average	54.79					

FRECC Capacity Charge Calculation

	2027	2028	2029	2030	2031	2032
Fuel Price (\$/mmBtu)						
EKPC Finance Rate						
TIER						
Year						
Generator Output (CAT G3516 A+) (kW)						
Heat Rate (Btu/kWh) (HHV)						
Capacity factor						
Gross generation (kWh)						
Station Service						
Net generation (kWh)						
EKPC LFGTE Capital Investment (\$)	1,642,705	1,546,076	1,449,446	1,352,816	1,256,187	1,159,557
Depreciation Expense	96,630	96,630	96,630	96,630	96,630	96,630
Interest Expense	96,090	92,407	88,555	84,526	80,311	75,904
Fuel Cost (\$)	153,457	156,526	159,657	162,850	166,107	169,429
O&M Cost (\$)	199,044	204,020	252,922	214,348	219,707	450,399
Int Rate * TIER * NBV	110,883	104,360	97,838	91,315	84,793	78,270
O&M + Depr Exp + (Int Rate * TIER * NBV)	406,556	405,009	447,390	402,293	401,129	625,299
Capacity Charge (\$/kW-month)	33.88	33.75	37.28	33.52	33.43	52.11
6-year average Capacity Charge to FRECC (\$/kW-month)	37.33					
FRECC COE (\$/MWh)	74.77	74.97	81.05	75.46	75.73	106.11
FRECC COE 6-year average (\$/MWh)	81.35	81.62	81.91	82.39	82.73	83.11
2013 Financial Forecast Cost to Members (\$/MWh)						
2013 Financial Forecast Cost to Members 6-year average (\$/MWh)						
Demand Charge West Glasgow Substation (\$/kW-month)	72,240	72,240	72,240	72,240	72,240	72,240
Actual FRECC COE (capacity charge less demand charge savings)	65.12	65.33	71.40	65.81	66.09	96.46
Actual FRECC COE (capacity charge less demand charge savings) 6-year average	71.70					
REC Value (\$/REC "\$/MWh")	112,347	112,347	112,347	112,347	112,347	112,347
Actual FRECC COE (capacity charge less demand charge savings less REC value)	50.12	50.33	56.40	50.81	51.09	81.46
Actual FRECC COE (capacity charge less demand charge savings less REC value) 6-year average	56.70					

FRECC Capacity Charge Calculation

	2033	2034	2035	2036	2037	2038
Fuel Price (\$/mmBtu)						
EKPC Finance Rate						
TIER						
Year						
Generator Output (CAT G3516 A+) (kW)						
Heat Rate (Btu/kWh) (HHV)						
Capacity factor						
Gross generation (kWh)						
Station Service						
Net generation (kWh)						
EKPC LFGTE Capital Investment (\$)	1,062,927	966,297	869,668	773,038	676,408	579,778
Depreciation Expense	96,630	96,630	96,630	96,630	96,630	96,630
Interest Expense	71,293	66,471	61,428	56,152	50,634	44,863
Fuel Cost (\$)	172,818	176,274	179,800	183,396	187,064	190,805
O&M Cost (\$)	230,829	236,600	293,312	248,578	254,793	522,325
Int Rate * TIER * NBV	71,748	65,225	58,703	52,180	45,658	39,135
O&M + Depr Exp + (Int Rate * TIER * NBV)	399,207	398,455	448,645	397,388	397,080	658,090
Capacity Charge (\$/kW-month)	33.27	33.20	37.39	33.12	33.09	54.84
6-year average Capacity Charge to FRECC (\$/kW-month)	37.48					
FRECC COE (\$/MWh)	76.37	76.73	83.91	77.54	77.99	113.34
FRECC COE 6-year average (\$/MWh)	84.32	84.75	85.21	85.89	86.42	86.98
2013 Financial Forecast Cost to Members (\$/MWh)						
2013 Financial Forecast Cost to Members 6-year average (\$/MWh)						
Demand Charge West Glasgow Substation (\$/kW-month)	72,240	72,240	72,240	72,240	72,240	72,240
Actual FRECC COE (capacity charge less demand charge savings)	66.73	67.09	74.26	67.90	68.35	103.69
Actual FRECC COE (capacity charge less demand charge savings) 6-year average	74.67					
REC Value (\$/REC "\$/MWh")	112,347	112,347	112,347	112,347	112,347	112,347
Actual FRECC COE (capacity charge less demand charge savings less REC value)	51.73	52.09	59.26	52.90	53.35	88.69
Actual FRECC COE (capacity charge less demand charge savings less REC value) 6-year average	59.67					

FRECC Capacity Charge Calculation

	2039	2040	2041	2042	2043	2044
Fuel Price (\$/mmBtu)						
EKPC Finance Rate						
TIER						
Year						
Generator Output (CAT G3516 A+) (kW)						
Heat Rate (Btu/kWh) (HHV)						
Capacity factor						
Gross generation (kWh)						
Station Service						
Net generation (kWh)						
EKPC LFGTE Capital Investment (\$)	483,149	386,519	289,889	193,259	96,630	0
Depreciation Expense	96,630	96,630	96,630	96,630	96,630	96,630
Interest Expense	38,827	32,513	25,910	19,003	11,778	4,222
Fuel Cost (\$)	194,621	198,513	202,484	206,533	210,664	214,877
O&M Cost (\$)	267,691	274,384	340,152	288,274	295,481	605,737
Int Rate * TIER * NBV	32,613	26,090	19,568	13,045	6,523	0
O&M + Depr Exp + (Int Rate * TIER * NBV)	396,934	397,103	456,350	397,949	398,634	702,366
Capacity Charge (\$/kW-month)	33.08	33.09	38.03	33.16	33.22	58.53
6-year average Capacity Charge to FRECC (\$/kW-month)	38.19					
FRECC COE (\$/MWh)	78.98	79.52	87.96	80.71	81.35	122.47
FRECC COE 6-year average (\$/MWh)	88.50	90.40				
2013 Financial Forecast Cost to Members (\$/MWh)						
2013 Financial Forecast Cost to Members 6-year average (\$/MWh)						
Demand Charge West Glasgow Substation (\$/kW-month)	72,240	72,240	72,240	72,240	72,240	72,240
Actual FRECC COE (capacity charge less demand charge savings)	69.34	69.88	78.32	71.06	71.71	112.82
Actual FRECC COE (capacity charge less demand charge savings) 6-year average	78.85					
REC Value (\$/REC "\$/MWh")	112,347	112,347	112,347	112,347	112,347	112,347
Actual FRECC COE (capacity charge less demand charge savings less REC value)	54.34	54.88	63.32	56.06	56.71	97.82
Actual FRECC COE (capacity charge less demand charge savings less REC value) 6-year average	63.85					

EXHIBIT 9 – EKPC ANNUAL OPERATION, MAINTENANCE AND FUEL COST

Operation and maintenance costs are depicted for a typical six-year maintenance overhaul cycle schedule for the Caterpillar 3516A+ engine generator. Initial costs represent 2014 costs for individual maintenance activities. Costs are then escalated at 2.5% annually for each activity for the 6-year cycle. Due to major overhaul cost, year 6 operation and maintenance costs are approximately twice yearly average costs for the previous 5 years.

Fuel cost will begin in 2015 at \$1.50/mmBtu and escalate based on the Consumer Price Index - All Urban Consumers escalation rate calculated yearly on the commercial operation date anniversary. Fuel cost based on expected hours of operation is predicted to be approximately \$121,000 per year in the first year of operation. The Consumer Price Index - All Urban Consumers escalation rate has averaged 1.93% per year since 2000. A 2.00% per year rate increase is utilized in the evaluation.

may not enter into the LFGTE Facility without being accompanied by an authorized agent, employee or representative of Purchaser.

ARTICLE IV

PRICE, BILLING, PAYMENT AND INCENTIVE

- 4.1 Purchase Price. Effective upon the start-up and Acceptance Testing of the LFGTE Facility (“Operational Date”), the initial purchase price for Conforming Landfill Gas delivered to Purchaser pursuant to the terms of the Agreement shall be a base price of \$1.50 per mmBtu, subject to the adjustment of Section 4.2.
- 4.2 Rate Adjustment. The purchase price for Conforming Landfill Gas shall be adjusted on each anniversary date of the completion of the Purchaser’s Facilities as defined in Section 7.2, in a percentage amount equal to one hundred (100) percent of the increase or decrease in the Consumers Price Index, All Urban Consumers (or any successor index) over the most recently reported twelve (12) month period.
- 4.3 Rounding. The price for Landfill Gas determined pursuant to this ARTICLE IV shall be rounded to the nearest one tenth of one cent (\$0.001).
- 4.4 Billing and Payment.
- a. Payment. On or before the tenth (10th) day of each calendar month, the Purchaser shall pay the Seller for all Landfill Gas delivered and any Non-Conforming Gas delivered and accepted by Purchaser in the preceding calendar month (subject to the limitations set forth in Section 4.1), along with all appropriate supporting information (“Billing Statement”). Such Billing Statement shall set forth the quantity of conforming Landfill Gas and Non-Conforming Gas, on a mmBtu basis, delivered to Purchaser during the preceding calendar month and the amount due Seller for such Landfill Gas. If the Seller, in good faith, disputes any part of the Billing Statement, the Seller shall inform the Purchaser in writing of such disagreement within ten (10) days of receipt of the Billing. Upon the resolution of a billing dispute, the Purchaser shall pay the amount finally determined to be correct within ten (10) days of such determination, along with interest.
 - b. Errors in Billing. If either party hereto shall find, at any time within one (1) year after the date of any payment hereunder, that there has been an overpayment or underpayment, the party finding the error shall promptly notify the other party in writing. In the event of an underpayment, Purchaser shall pay any undisputed amount due, plus interest, within thirty (30) days of the date of the notice of error. In the event of an overpayment, Seller shall refund any undisputed overpayment to Purchaser, including interest on any such amount(s), via a reduction in the next monthly payment.
 - c. Interest. For purposes of Section 4.4, interest shall accrue on any amount over paid or not paid on or before the due date therefore at a rate equal to one (1)

Case No. 2014-00292 – Glasgow LFGTE Project
Response to Commission Staff's First Request for Information –
October 27, 2014 Motion for Confidential Treatment

Response to Request 15, page 1 of 2

Response to Request 17, page 3 of 3

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2014-00292
RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 10/09/14
REQUEST 15

RESPONSIBLE PARTY: Jeff Brandt

Request 15. Refer to page 3 of the Application, paragraph 5, which states, "The cost of the capacity, energy, and environmental attributes sold to Farmers under the Agreement is priced below the cost of the bundled wholesale rate charged by EKPC to Farmers pursuant to the Wholesale Power Agreement." Provide the calculations supporting this statement.

Response 15. Refer to Exhibit 6 of the application, included is the project Pro Forma.

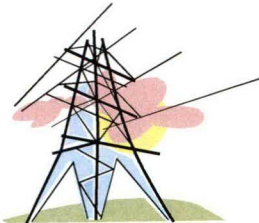
Assumptions:

Generation	7,490 MWh per year	
Capital Cost	\$2,898,892	Depreciation 30-year straight line
Fuel Cost	\$1.50/mmBtu	2.00% escalation per year
O&M Costs	Table provided in Exhibit 9	2.5% escalation per year
Capacity	1 MW	
TIER	1.50	
Interest Rate	4.5%	

In the Pro Forma each year depreciation expense, O&M, and the product of interest rate, TIER, and net book value are summed. The monthly capacity charge is this sum



ST KENTUCKY POWER COOPERATIVE
 O. BOX 707
 75 LEXINGTON ROAD
 WINCHESTER, KENTUCKY 40392-0707



BILLED TO: **Farmer's RECC**
P. O. Box 1298
Glasgow, Kentucky 42142-1298

INVOICE NUMBER **IN00388**

Phone No. 270-651-2191
 Fax No. 270-651-7332

INVOICE DATE **11/1/2014**
 VENDOR # **CO3400**

QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
MMBTU	OCTOBER 2014 METHANE GAS USAGE FOR GLASGOW LFGTE FACILITY	RATE PER MMBTU	
12,057		\$1.50	\$18,085.50
DIRECT ALL QUESTIONS CONCERNING THIS INVOICE TO LAURA WILSON EXT 752 PHONE: 859-745-9752 PAYMENT DUE ON THE 15TH DAY OF THE MONTH FOLLOWING PERIOD APPLICABLE OR THE 10TH DAY FOLLOWING RECEIPT OF INVOICE, WHICHEVER IS LATER.			

TOTAL AMOUNT THIS INVOICE **\$18,085.50**

Case No. 2014-00292 – Glasgow LFGTE Project
Response to Commission Staff’s Second Request for Information –
November 24, 2014 Motion for Confidential Treatment

Response to Request 2a, page 2 of 4

Response to Request 2b, page 3 of 4 [Redaction reflects Confidential from March 30, 2015
Order]

Response to Request 2d, page 4 of 4

$$\begin{aligned} \text{FRECC Cost of Energy (COE)} &= \text{Total Cost} / \text{Generation} \\ &= (\text{O\&M} + \text{Depreciation Expense} + (\text{Interest Rate} * \text{TIER} * \text{NBV}) + \text{Fuel Cost}) / \text{Net Generation} \\ &= (148,000 + 96,630 + (0.045 * 1.5 * 2,802,262) + 121,000) / 7,489.800 \\ &= \$74.07/\text{MWh} \end{aligned}$$

$$\begin{aligned} \text{FRECC COE Average for first 6-year term} &= (74.07+74.02+78.33+73.97+73.97+96.35)/6 \\ &= \$78.45/\text{MWh} \end{aligned}$$

$$\begin{aligned} \text{Demand Charge Savings} &= \text{Substation Demand Charge} * \text{kW Capacity Reduction} * \text{months/year} \\ &= 6.02 * 1000 * 12 \\ &= \$72,240/\text{year} \end{aligned}$$

$$\begin{aligned} \text{FRECC COE including demand charge savings} &= (\text{O\&M} + \text{Depreciation Expense} + (\text{Interest Rate} * \text{TIER} * \text{NBV}) + \text{Fuel Cost} - \text{Demand Charge Savings}) / \text{Net Generation} \\ &= (148,000 + 96,630 + (0.045 * 1.5 * 2,802,262) + 121,000 - 72,240) / 7,489.800 \\ &= \$64.43/\text{MWh} \end{aligned}$$

$$\begin{aligned} \text{FRECC COE including demand charge savings average for first 6-year term} &= (64.43+64.37+68.69+64.32+64.33+86.71)/6 \\ &= \$68.81/\text{MWh} \end{aligned}$$

$$\begin{aligned} \text{FRECC COE including demand charge savings and Renewable Energy Credit Value} &= (\text{O\&M} + \text{Depreciation Expense} + (\text{Interest Rate} * \text{TIER} * \text{NBV}) + \text{Fuel Cost} - \text{Demand Charge Savings} - \text{REC Value}) / \text{Net Generation} \\ &= (148,000 + 96,630 + (0.045 * 1.5 * 2,802,262) + 121,000 - 72,240 - 112,347) / 7,489.800 \\ &= \$49.43/\text{MWh} \end{aligned}$$

$$\begin{aligned} \text{FRECC COE including demand charge savings and REC value average for first 6-year term} &= (49.43+49.37+53.69+49.32+49.33+71.71)/6 \\ &= \$53.81/\text{MWh} \end{aligned}$$

Request 2b. For the year 2015, provide the calculations which demonstrate that the "[t]he cost of the capacity, energy, and environmental attributes sold to Farmers under the Agreement is priced below the cost of the bundled wholesale rate charged by EKPC to Farmers pursuant to the Wholesale Power Agreement," as stated on page 3 of the Application, paragraph 5.

Response 2b. For the year 2015 as calculated in Response 2a., the FRECC COE (including capacity, energy, and environmental attributes) including the demand charge savings is \$64.43/MWh. This was compared to the EKPC 2013 Financial Forecast all-in Cost to Members of [REDACTED]

Request 2c. Explain what is meant by "yearly facility cost" as used in the response and provide the calculation for the year 2015 if not provided in part a. above.

Response 2c. Yearly facility cost is the sum of O&M, depreciation expense, plus the product of interest rate, TIER, and net book value of the asset. The calculation is used in Response 2a. to determine the capacity charge.

Request 2d. The response states that "[a]dditional savings Farmers will realize are from reduced demand charge at the EKPC substation which this facility is tied to." Explain the meaning of this statement and state from what amount, and to what amount, the demand charged is reduced.

Response 2d. Refer to Response 2a. for the calculation. Due to the fact the LFGTE facility generator will be connected to the distribution side of the West Glasgow substation and the generator is a designated resource for FRECC, demand charge to FRECC on the substation will be reduced by the capacity of the generator. The current demand charge for the West Glasgow Substation is \$6.02/kW-month. This translates into a savings of \$72,240/year to FRECC. For the year 2015 this effectively reduces the FRECC COE from \$74.07/MWh to \$64.43/MWh

Request 2e. Provide an electronic copy of Exhibit 6 of the application with the formulas intact and unprotected and all rows and columns accessible.

Response 2e. An electronic copy of Exhibit 6 of the application with the formulas intact and unprotected and all rows and columns accessible is included on the attached CD, filed under seal and subject to confidential treatment.