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PUBLIC SERVICE COMMISSION

April 3, 2015

VIA HAND DELIVERY

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

RE:

Case No. 2014-00292

Dear Mr. Derouen:

Pursuant to the Commission's March 30, 2015 Orders concerning requests for confidential treatment, please find one original and ten copies of East Kentucky Power Cooperative, Inc. ("EKPC") revised pages reflecting as unredacted the information that has been denied confidential treatment. 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.

Please note that the enclosed pages also reflect the redaction of those items that the Commission granted confidential treatment. In addition, EKPC will be seeking formal reconsideration of the Commission's denial of confidential treatment of the fuel cost component of this proposal. This will be done in the coming days by filing a Motion for Rehearing pursuant to KRS 278.400. Until that matter can be finally resolved, all document references to the fuel cost component remain redacted on the enclosed pages.

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

Very truly yours,

David S. Samford

Enclosures

Parties of Record cc:

Sauid Samuel &

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

Application – page 5

Exhibit 1 of Schedule A – Sale of Capacity, Energy and Environmental Attribute Rates

Exhibit 6, page 1

Exhibit 6, pages 2 through 6

Exhibit 7, page 2

Exhibit 9, page 1

Exhibit 9, page 2

Exhibit 10, pages 2 through 31

Exhibit 13, page 6

duplication of .. facilities," must not "conflict with the existing certificates or service of other utilities operating in the area .," and must not "involve sufficient capital outlay to materially affect the existing financial condition of the utility involved, or will not result in increased charges to its customers"

- (b) The Project proposed by EKPC involves generation output of one (1) MW or less and will represent an individual investment of approximately \$2.9 million <sup>1</sup> No Site compatibility certificate is required for the Glasgow LFGTE Facility, pursuant to the provisions of KRS 278 216(1) This facility will provide small, but reliable and economic quantities of electric energy to EKPC for sale to Farmers utilizing renewable resources, and will not require investments sufficient to materially affect the financial condition of EKPC, or require an increase in EKPC's wholesale power rates
- (c) The proposed generating facility for the Project will be constructed on a leased portion of the landfill itself, and will be connected to Farmers' facilities in the vicinity. The facilities will not compete or conflict with the existing certificates or services of any other jurisdictional utilities in the area. Therefore, such facilities will not represent wasteful duplication of plant, equipment, property or facilities.
- Attached hereto as Exhibits 4 through 13, are detailed information concerning the Project including descriptions of the Project, capital and operating cost estimates, financing information, feasibility studies, gas supply agreement and site lease, a map and such other information relevant to the Project. This Project is very similar to the Bavarian LFGTE project, which was approved by the Commission in PSC Case No. 2002-00352 on December 18, 2002, the Green Valley and Laurel Ridge Projects, which were approved by the Commission in PSC

<sup>&</sup>lt;sup>1</sup> A Motion for Confidential Treatment of this and similar confidential and proprietary information filed as part of this Application has been filed contemporaneously herewith

### Schedule A-Sale of Capacity, Energy and Environmental Attribute Rates

- I. Initial Rates: \$38.36/kW-month (first 6-year cycle) plus the actual cost of fuel purchased by EKPC to operate the LFGTE Facility during the month
- II. Subsequent Rate Changes Set up on 6-year cycles based on engine major overhaul cycles. Initial six year capacity charge \$38.36/kW—month plus the actual cost of fuel purchased by EKPC to operate the LGFTE Facility during the month, second 6-year cycle \$37.64/kW—month plus the actual cost of fuel purchased by EKPC to operate the LFGTE Facility during the month.
- III. Obligation to Pay Farmers shall be obligated to tender a payment each month regardless of the amount of power that is produced by the LFGTE Facility, except as set forth in Section 9.03(d).

### **REDACTED**

## EXHIBIT 6- EKPC COST COMPARISONS WITH OTHER EKPC LFGTE GENERATION OPTIONS

Since 2005	generation	costs	from	EKPC's	existing	LFGTE	fleet	has ran	ged f	rom	a lo	w of
\$33 32/MWI	n in 2008	to a	hıgh	of \$53 7	7/MWh 1	n 2012.	The	Glasgow	LFO	<b>GTE</b>	Proje	ct is
expected to	generate a	at a	cost	of		to		over	the	first	SIX	year
maintenance	cycle with a	six-ye	ear ave	age cost	of generat	ion of						

FRECC Capacity Charge Calculation
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 (\$)
Depreciation Expense
Interest Expense
Fuel Cost (\$)
O&M Cost (\$)
int Rate * TIER * NBV
O&M + Depr Exp + (Int Rate * TIER * NBV)
Capacity Charge (\$/kW-month)
6-year average Capacity Charge to FRECC (\$/kW-month)
FRECC COE (\$/MWh)
FRECC COE 6 year average (\$/MWh)
2013 Financial Forecast Cost to Members (\$/MWh)
2013 Financial Forecast Cost to Members 6 year average (\$/MWh)
Demand Charge West Glasgow Substation (\$/kW month)
Actual FRECC COE (capacity charge less demand charge savings)
Actual FRECC COE (capacity charge less demand charge savings) 6-year average
REC Value (\$/REC "\$/MWh")
Actual FRECC COE (capacity charge less demand charge savings less REC value)
Actual FRECC COE (capacity charge less demand charge savings less REC value) 6-year average

0 045						
1 500						
2014	2015	2016	2017	2018	2019	2020
1000						
10,750						
0 90						
7,884,000						
0 05					-	
7,489,800						
2,898,892	2,802,262	2,705,633	2,609,003	2,512,373	2,415,743	2,319,114
30	96,630	96,630	96,630	96,630	96,630	96,630
	129,493	127,345	125,098	122,748	120,289	117,718
	148,000	151,700	188,062	159,380	163,364	334,897
	189,153	182,630	176,108	169,585	163,063	156,540
	433,782	430,960	460,799	425,595	423,057	588,067
	36 15	35 91	38 40	35 47	35 25	49 01
	38 36					
6 02	72,240	72,240	72,240	72,240	72,240	72,240
	•					
15	112,347	112,347	112,347	112,347	112,347	112,347

#### **FRECC Capacity Charge Calculation**

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 (\$)

Depreciation Expense

Interest Expense

Fuel Cost (\$)

O&M Cost (\$)

Int Rate \* TIER \* NBV

O&M + Depr Exp + (Int Rate \* TIER \* NBV)

Capacity Charge (\$/kW month)

6 year average Capacity Charge to FRECC (\$/kW-month)

FRECC COE (\$/MWh)

FRECC COE 6-year average (\$/MWh)

2013 Financial Forecast Cost to Members (\$/MWh)

2013 Financial Forecast Cost to Members 6-year average (\$/MWh)

Demand Charge West Glasgow Substation (\$/kW-month)

Actual FRECC COE (capacity charge less demand charge savings)

Actual FRECC COE (capacity charge less demand charge savings) 6 year average

REC Value (\$/REC "\$/MWh")

Actual FRECC COE (capacity charge less demand charge savings less REC value)

Actual FRECC COE (capacity charge less demand charge savings less REC value) 6-year average

				-	
2,222,48	4 2,125,854	2,029,224	1,932,595	1,835,965	1,739,335
96,63	0 96,630	96,630	96,630	96,630	96,630
115,02	9 112,216	109,274	106,196	102,978	99,611
171,63	5 175,925	218,094	184,832	189,453	388,378
150,01	8 143,495	136,973	130,450	123,928	117,405
418,28	2 416,050	451,696	411,912	410,010	602,413
34 8	6 34 67	37 64	34 33	34 17	50 20
37 6	4				
72,24	0 72,240	72,240	72,240	72,240	72,240
112,34		112,347	112,347	112,347	112,347

2023

2024

2025

2026

2021

2022

FRECC Capacity Charge Calculation
Fuel Price (\$/mmBtu)

Fuel Price (\$/mmBtu EKPC Finance Rate

TIER

Year

Generator Output (CAT G3516 A+) (kW)

Heat Rate (Btu/kWh) (HHV)

Capacity facto

Gross generation (kWh)

Station Service

Net generation (kWh)

EKPC LFGTE Capital Investment (\$)

Depreciation Expense

Interest Expense

Fuel Cost (\$)

O&M Cost (\$) Int Rate \* TIER \* NBV

O&M + Depr Exp + (Int Rate \* TIER \* NBV)

Capacity Charge (\$/kW-month)

6-year average Capacity Charge to FRECC (\$/kW-month)

FRECC COE (\$/MWh)

FRECC COE 6 year average (\$/MWh)

2013 Financial Forecast Cost to Members (\$/MWh)

2013 Financial Forecast Cost to Members 6 year average (\$/MWh)

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REC Value (\$/REC "\$/MWh")

Actual FRECC COE (capacity charge less demand charge savings less REC value)

Actual FRECC COE (capacity charge less demand charge savings less REC value) 6-year average

1,642,705	1,546,076	1,449,446	1,352,816	1,256,187	1,159,557
96,630	96,630	96,630	96,630	96,630	96,630
96,090	92,407	88,555	84,526	80,311	75,904
199,044	204,020	252,922	214,348	219,707	450,399
110,883	104,360	97,838	91,315	84,793	78,270
406,556	405,009	447,390	402,293	401,129	625,299
33 88	33 75	37 28	33 52	33 43	52 11
37 33			_		_
72,240	72,240	72,240	72,240	72 <u>,</u> 240	72,240
112,347	112,347	112,347	112,347	112,347	112,347
_					

2029

2030

2031

2032

2027

2028

FRECC Canacity Charge C	alculation

Fuel Price (\$/mmBtu)

EKPC Finance Rate

TIER Year

rear

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 (\$)

Depreciation Expense

Interest Expense

Fuel Cost (\$)

O&M Cost (\$)

Int Rate \* TIER \* NBV

O&M + Depr Exp + (Int Rate \* TIER \* NBV)

Capacity Charge (\$/kW-month)

6-year average Capacity Charge to FRECC (\$/kW-month)

FRECC COE (\$/MWh)

FRECC COE 6 year average (\$/MWh)

2013 Financial Forecast Cost to Members (\$/MWh)

2013 Financial Forecast Cost to Members 6 year average (\$/MWh)

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Actual FRECC COE (capacity charge less demand charge savings) 6-year average

REC Value (\$/REC "\$/MWh")

Actual FRECC COE (capacity charge less demand charge savings less REC value)

Actual FRECC COE (capacity charge less demand charge savings less REC value) 6-year average

62,927	966,297	869,668	773,038	676,408	579,778
96,630	96,630	96,630	96,630	96,630	96,630
71,293	66,471	61,428	56,152	50,634	44,863
30,829	236,600	293,312	248,578	254,793	522,325
71,748	65,225	58,703	52,180	45,658	39,135
99,207	398,455	448,645	397,388	397,080	658,090
33 27	33 20	37 39	33 12	33 09	54 84
37 48					
72,240	72,240	72,240	72,240	72,240	72,240
	442 247	440 047	142 247	442 242	442 247
12,347	112,347	112,347	112,347	112,347	112,347
	96,630 71,293 30,829 71,748 99,207 33 27 37 48	96,630 96,630 71,293 66,471 330,829 236,600 71,748 65,225 99,207 398,455 33 27 33 20 37 48 72,240 72,240	96,630 96,630 96,630 71,293 66,471 61,428 330,829 236,600 293,312 71,748 65,225 58,703 99,207 398,455 448,645 33 27 33 20 37 39 37 48 72,240 72,240 72,240	96,630 96,630 96,630 96,630 71,293 66,471 61,428 56,152 30,829 236,600 293,312 248,578 71,748 65,225 58,703 52,180 99,207 398,455 448,645 397,388 33 27 33 20 37 39 33 12 37 48 72,240 72,240 72,240 72,240	96,630 96,630 96,630 96,630 96,630 71,293 66,471 61,428 56,152 50,634  30,829 236,600 293,312 248,578 254,793 71,748 65,225 58,703 52,180 45,658 99,207 398,455 448,645 397,388 397,080 33 27 33 20 37 39 33 12 33 09 37 48  72,240 72,240 72,240 72,240 72,240

2033

2034

2035

2036

2038

2037

FRECC Capacity Charge Calculation
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 (\$)
Depreciation Expense
Interest Expense
Fuel Cost (\$)
O&M Cost (\$)
Int Rate * TIER * NBV
O&M + Depr Exp + (Int Rate * TIER * NBV)
Capacity Charge (\$/kW-month)
5-year average Capacity Charge to FRECC (\$/kW month)
FRECC COE (\$/MWh)
FRECC COE 6 year average (\$/MWh)
2013 Financial Forecast Cost to Members (\$/MWh)
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REC Value (\$/REC "\$/MWh")
Actual FRECC COE (capacity charge less demand charge savings less REC value)

Actual FRECC COE (capacity charge less demand charge savings less REC value) 6-year average

2039	2040	2041	2042	2043	2044
				•	
483,149	386,519	289,889	193,259	96,630	o
96,630	-	96,630	96,630	96,630	96,630
38,827	•	25,910	19,003	11,778	4,222
50,027	52,515	20,010	15,005	11,770	7,222
267,691	274,384	340,152	288,274	295,481	605,737
32,613	26,090	19,568	13,045	6,523	0
396,934	397,103	456,350	397,949	398,634	702,366
33 08	33 09	38 03	33 16	33 22	58 53
38 19					
	-				
72,240	72,240	72,240	72,240	72,240	72,240
	,				
	I				
112,347	112,347	112,347	112,347	112,347	112,347

## Exhibit 7, Page 2

٨	Land Improvements	Budget
	Roadways & Parking Area	5,000
	Walkways	0
	Gravel	20,000
	Fencing	15,000
	Plant Lighting	5,000
	Landscaping	0
		45,000
	Site Development	
	Soil Borings	2,500
	Excavation/Recompaction Grading/Fill	15,000
	Sewer/Water	27,000 5,000
	Utility Hookups	0
	Engineering	2,500
	Permitting	3,000
	· crimeing	55,000
С	Building & Interconnect	55,000
	Engine Bldg Foundation	62,500
15	Engine Building	124,076
16	Compressor Enclosure	0
	General Con Expen	61,200
18	Fire Protection	0
19	Methane Detection Systems	0
20	Utility Interconnect	0
21	Switchyard Electrical	102,700
		350,476
	Equipment	<del></del>
	Engine Foundations	3,600
	Compressor Foundations	8,700
	Air Cooler Found	4,800
	Control Room Foundation	0
	Optional Equipment Foundations	22,300
	Engines	727,360
	FGC Compressor	150,000
	Control Room Switchgear/MCC Instrument Air Compressor	240,000 0
	G C & Flow Meter	68,000
	Optional Equipment	40,000
	Freight	40,000
	Equipment Installation	314,000
	Electrical Hookup	247,100
36	Mechanical Engineering	0
37	Electrical Engineering	0
	Furniture & Fixtures	0
	Equipment HVAC	8,236
40	Insulation & Heat Tracing	0
_	Collection System	1,874,096
	Collection System Design	<sub>0</sub>
	Installation	20,000
	Inlet Knock Out Pot and Pump	30,000
	•	50,000
	Start-Up	
	Labor	68,200
	Spare Parts/Initial Stocks	0
	Utilities	0
47	Other Start-Up	68,200
G	Construction Management	30,200
	LFG Technologies Engineering Cost	118,920
49	Performance/Payment Bond	0
	Construction Site Supervision	94,800
	Construction GC Overhead and Profit	204,900
	LFG Tech Insurance	25,000
	Construction GC Insurance	12,500
	Outside Legal Construction Period Interest	0
	Deferred Site Gas testing Costs	0
	Deferred Project Development Costs	0
	Contingency/Other	0
		456,120
	Total Project	2,898,892

#### REDACTED

### 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 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 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.

Year	Initial Cost	1	2	3	4	5	6
Labor, Supervision	85,000	85,000	87,125	89,303	91,536	93,824	96,170
Oil	12,000	12,000	12,300	12,608	12,923	13,246	13,577
Spark Plugs	3,000	3,000	3,075	3,152	3,231	3,311	3,394
Air Filters	1,000	1,000	1,025	1,051	1,077	1,104	1,131
Turbo-Charger	4,000	4,000	4,100	4,203	4,308	4,415	4,526
Water Pump	1,000	1,000	1,025	1,051	1,077	1,104	1,131
Top End (year 1,2,4,5)	17,000	17,000	17,425	0	18,307	18,765	0
In-frame (year 3)	48,000	0	0	50,430	0	0	0
Major Over-haul (year 6)	165,000	0	0	0	0	0	186,682
Electrical Maintenance	10,000	10,000	10,250	10,506	10,769	11,038	11,314
Miscellaneous	15,000	15,000	15,375	15,759	16,153	16,557	16,971
Yearly Total	-	148,000	151,700	188,062	159,380	163,364	334,897

## Exhibit 10, Page 2

Capital Cost (\$)	2,898,892											
Interest Rate	0 045											
Loan Period (Years)	30											
Year												1
Month	1	2	3	4	5	6	7	8	9	10	11	12
Monthly Payment	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688
Monthly Principal	3,817	3,832	3,846	3,861	3,875	3,890	3,904	3,919	3,933	3,948	3,963	3,978
Monthly Interest	10,871	10,857	10,842	10,828	10,813	10,799	10,784	10,770	10,755	10,740	10,725	10,710
Yearly Payment												176,259
Yearly Principal												46,766
Yearly Interest	1		,	1								129,493
Depreciation	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052
Yearly Depreciation		(										96,630

Capital Cost (\$)												
Interest Rate												
Loan Period (Years)												
Year												2
Month	13	14	15	16	17	18	19	20	21	22	23	24
Monthly Payment	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688
Monthly Principal	3,993	4,008	4,023	4,038	4,053	4,068	4,083	4,099	4,114	4,130	4,145	4,161
Monthly Interest	10,695	10,681	10,665	10,650	10,635	10,620	10,605	10,589	10,574	10,559	10,543	10,528
Yearly Payment												176,259
Yearly Principal												48,914
Yearly Interest	'									1		127,345
Depreciation	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052
Yearly Depreciation		-									,	96,630

Capital Cost (\$)												
Interest Rate												
Loan Period (Years)												
Year												3
Month	25	26	27	28	29	30	31	32	33	34	35	36
Monthly Payment	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688
Monthly Principal	4,176	4,192	4,208	4,223	4,239	4,255	4,271	4,287	4,303	4,319	4,335	4,352
Monthly Interest	10,512	10,496	10,481	10,465	10,449	10,433	10,417	10,401	10,385	10,369	10,353	10,337
Yearly Payment												176,259
Yearly Principal												51,161
Yearly Interest										1 .		125,098
Depreciation	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052
Yearly Depreciation		,										96,630

Capital Cost (\$) Interest Rate Loan Period (Years)												
Year												4
Month	37	38	39	40	41	42	43	44	45	46	47	48
Monthly Payment	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688
Monthly Principal	4,368	4,384	4,401	4,417	4,434	4,451	4,467	4,484	4,501	4,518	4,535	4,552
Monthly Interest	10,320	10,304	10,287	10,271	10,254	10,238	10,221	10,204	10,187	10,171	10,154	10,137
Yearly Payment												176,259
Yearly Principal												53,512
Yearly Interest		, ,		```							*	122,748
Depreciation	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052
Yearly Depreciation			,				,					96,630

Capital Cost (\$)												
Interest Rate												
Loan Period (Years)												
Year												5
Month	49	50	51	52	53	54	55	56	57	58	59	60
Monthly Payment	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688
Monthly Principal	4,569	4,586	4,603	4,620	4,638	4,655	4,673	4,690	4,708	4,725	4,743	4,761
Monthly Interest	10,120	10,102	10,085	10,068	10,051	10,033	10,016	9,998	9,981	9,963	9,945	9,927
Yearly Payment												176,259
Yearly Principal												55,970
Yearly Interest												120,289
Depreciation	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052
Yearly Depreciation												96.630

Capital Cost (\$) Interest Rate												
Loan Period (Years)												
Year												6
Month	61	62	63	64	65	66	67	68	69	70	71	72
Monthly Payment	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688
Monthly Principal	4,779	4,797	4,815	4,833	4,851	4,869	4,887	4,905	4,924	4,942	4,961	4,979
Monthly Interest	9,910	9,892	9,874	9,856	9,838	9,819	9,801	9,783	9,764	9,746	9,727	9,709
Yearly Payment												176,259
Yearly Principal												58,541
Yearly Interest			1									117,718
Depreciation	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052
Yearly Depreciation		,										96,630

Capital Cost (\$)												
Interest Rate												
Loan Period (Years)												
Year												7
Month	73	74	75	76	77	78	79	80	81	82	83	84
Monthly Payment	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688
Monthly Principal	4,998	5,017	5,036	5,055	5,074	5,093	5,112	5,131	5,150	5,169	5,189	5,208
Monthly Interest	9,690	9,671	9,653	9,634	9,615	9,596	9,577	9,557	9,538	9,519	9,499	9,480
Yearly Payment												176,259
Yearly Principal												61,230
Yearly Interest		, , , , , , , , , , , , , , , , , , ,										115,029
Depreciation	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052
Yearly Depreciation												96, <u>63</u> 0

Capital Cost (\$)												
Interest Rate												
Loan Period (Years)												
Year												8
Month	85	86	87	88	89	90	91	92	93	94	95	96
Monthly Payment	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688
Monthly Principal	5,228	5,247	5,267	5,287	5,307	5,327	5,347	5,367	5,387	5,407	5,427	5,448
Monthly Interest	9,460	9,441	9,421	9,401	9,382	9,362	9,342	9,322	9,302	9,281	9,261	9,241
Yearly Payment												176,259
Yearly Principal												64,043
Yearly Interest		,		,						, 		112,216
Depreciation	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052
Yearly Depreciation												96,630

Capital Cost (\$)												
Interest Rate												
Loan Period (Years)												
Year												9
Month	97	98	99	100	101	102	103	104	105	106	107	108
Monthly Payment	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688
Monthly Principal	5,468	5,488	5,509	5,530	5,550	5,571	5,592	5,613	5,634	5,655	5,676	5,698
Monthly Interest	9,220	9,200	9,179	9,159	9,138	9,117	9,096	9,075	9,054	9,033	9,012	8,991
Yearly Payment												176,259
Yearly Principal												66,986
Yearly Interest		,,										109,274
Depreciation	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052
Yearly Depreciation		1										96,630

Capital Cost (\$) Interest Rate Loan Period (Years)												
Year												10
Month	109	110	111	112	113	114	115	116	117	118	119	120
Monthly Payment	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688
Monthly Principal	5,719	5,741	5,762	5,784	5,805	5,827	5,849	5,871	5,893	5,915	5,937	5,960
Monthly Interest	8,969	8,948	8,926	8,905	8,883	8,861	8,839	8,817	8,795	8,773	8,751	8,729
Yearly Payment												176,259
Yearly Principal												70,063
Yearly Interest				**********								106,196
Depreciation	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052
Yearly Depreciation			, (	·								96,630

Capital Cost (\$)												
Interest Rate												
Loan Period (Years)												
Year												11
Month	121	122	123	124	125	126	127	128	129	130	131	132
Monthly Payment	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688
Monthly Principal	5,982	6,004	6,027	6,049	6,072	6,095	6,118	6,141	6,164	6,187	6,210	6,233
Monthly Interest	8,706	8,684	8,661	8,639	8,616	8,593	8,571	8,548	8,525	8,501	8,478	8,455
Yearly Payment												176,259
Yearly Principal												73,282
Yearly Interest									1			102,978
Depreciation	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052
Yearly Depreciation												96,630

Capital Cost (\$) Interest Rate												
Loan Period (Years)												
Year												12
Month	133	134	135	136	137	138	139	140	141	142	143	144
Monthly Payment	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688
Monthly Principal	6,257	6,280	6,304	6,327	6,351	6,375	6,399	6,423	6,447	6,471	6,495	6,520
Monthly Interest	8,432	8,408	8,385	8,361	8,337	8,313	8,289	8,265	8,241	8,217	8,193	8,169
Yearly Payment												176,259
Yearly Principal												76,648
Yearly Interest												99,611
Depreciation	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052
Yearly Depreciation												96,630

Capital Cost (\$)												
Interest Rate												
Loan Period (Years)												
Year												13
Month	145	146	147	148	149	150	151	152	153	154	155	156
Monthly Payment	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688
Monthly Principal	6,544	6,569	6,593	6,618	6,643	6,668	6,693	6,718	6,743	6,768	6,794	6,819
Monthly Interest	8,144	8,120	8,095	8,070	8,045	8,021	7,996	7,970	7,945	7,920	7,895	7,869
Yearly Payment												176,259
Yearly Principal												80,169
Yearly Interest				*************						,		96,090
Depreciation	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052
Yearly Depreciation												96,630

Capital Cost (\$)												
Interest Rate												
Loan Period (Years)												
Year												14
Month	157	158	159	160	161	162	163	164	165	166	167	168
Monthly Payment	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688
Monthly Principal	6,845	6,870	6,896	6,922	6,948	6,974	7,000	7,026	7,053	7,079	7,106	7,132
Monthly Interest	7,844	7,818	7,792	7,766	7,740	7,714	7,688	7,662	7,635	7,609	7,582	7,556
Yearly Payment												176,259
Yearly Principal												83,852
Yearly Interest												92,407
Depreciation	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052
Yearly Depreciation												96,630

			•									
Capital Cost (\$) Interest Rate												
Loan Period (Years)												
Year												15
Month	169	170	171	172	173	174	175	176	177	178	179	180
Monthly Payment	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688
Monthly Principal	7,159	7,186	7,213	7,240	7,267	7,294	7,322	7,349	7,377	7,404	7,432	7,460
Monthly Interest	7,529	7,502	7,475	7,448	7,421	7,394	7,366	7,339	7,311	7,284	7,256	7,228
Yearly Payment												176,259
Yearly Principal												87,704
Yearly Interest												88,555
Depreciation	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052
Yearly Depreciation		()	.,				1				· · · · · · · · · · · · · · · · · · ·	96.630

Capital Cost (\$)												
Interest Rate												
Loan Period (Years)												
Year												16
Month	181	182	183	184	185	186	187	188	189	190	191	192
Monthly Payment	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688
Monthly Principal	7,488	7,516	7,544	7,573	7,601	7,630	7,658	7,687	7,716	7,745	7,774	7,803
Monthly Interest	7,200	7,172	7,144	7,116	7,087	7,059	7,030	7,001	6,973	6,944	6,915	6,885
Yearly Payment												176,259
Yearly Principal												91,733
Yearly Interest	,											84,526
Depreciation	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052
Yearly Depreciation						,					.,	96,630

Capital Cost (\$) Interest Rate Loan Period (Years)												
Year												17
Month	193	194	195	196	197	198	199	200	201	202	203	204
Monthly Payment	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688
Monthly Principal	7,832	7,861	7,891	7,921	7,950	7,980	8,010	8,040	8,070	8,100	8,131	8,161
Monthly Interest	6,856	6,827	6,797	6,768	6,738	6,708	6,678	6,648	6,618	6,588	6,557	6,527
Yearly Payment												176,259
Yearly Principal												95,948
Yearly Interest												80,311
Depreciation	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052
Yearly Depreciation		-										96,630

Capital Cost (\$) Interest Rate												
Loan Period (Years)												
• •												
Year												18
Month	205	206	207	208	209	210	211	212	213	214	215	216
Monthly Payment	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688
Monthly Principal	8,192	8,223	8,253	8,284	8,315	8,347	8,378	8,409	8,441	8,473	8,504	8,536
Monthly Interest	6,496	6,466	6,435	6,404	6,373	6,342	6,310	6,279	6,247	6,216	6,184	6,152
Yearly Payment												176,259
Yearly Principal												100,356
Yearly Interest		_		-								75,904
Depreciation	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052
Yearly Depreciation												96,630

Capital Cost (\$) Interest Rate												
Loan Period (Years)												
Year												19
Month	217	218	219	220	221	222	223	224	225	226	227	228
Monthly Payment	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688
Monthly Principal	8,568	8,600	8,633	8,665	8,697	8,730	8,763	8,796	8,829	8,862	8,895	8,928
Monthly Interest	6,120	6,088	6,056	6,023	5,991	5,958	5,925	5,893	5,860	5,826	5,793	5,760
Yearly Payment												176,259
Yearly Principal												104,966
Yearly Interest	,		, 1						*			71,293
Depreciation	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052
Yearly Depreciation												96,630

Capital Cost (\$) Interest Rate												
Loan Period (Years)												
Year												20
Month	229	230	231	232	233	234	235	236	237	238	239	240
Monthly Payment	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688
Monthly Principal	8,962	8,995	9,029	9,063	9,097	9,131	9,165	9,200	9,234	9,269	9,304	9,339
Monthly Interest	5,726	5,693	5,659	5,625	5,591	5,557	5,523	5,489	5,454	5,419	5,385	5,350
Yearly Payment												176,259
Yearly Principal												109,788
Yearly Interest												66,471
Depreciation	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052
Yearly Depreciation								<del></del>				96,630

Capital Cost (\$)												
Interest Rate												
Loan Period (Years)												
Year												21
Month	241	242	243	244	245	246	247	248	249	250	251	252
Monthly Payment	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688
Monthly Principal	9,374	9,409	9,444	9,479	9,515	9,551	9,586	9,622	9,658	9,695	9,731	9,768
Monthly Interest	5,315	5,280	5,244	5,209	5,173	5,138	5,102	5,066	5,030	4,994	4,957	4,921
Yearly Payment												176,259
Yearly Principal												114,832
Yearly Interest				, ,				~~~~~~~~ h				61,428
Depreciation	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052
Yearly Depreciation											, , , , , , , , , , , , , , , , , , ,	96,630

Capital Cost (\$) Interest Rate												
Loan Period (Years)												
Year												22
Month	253	254	255	256	257	258	259	260	261	262	263	264
Monthly Payment	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688
Monthly Principal	9,804	9,841	9,878	9,915	9,952	9,989	10,027	10,064	10,102	10,140	10,178	10,216
Monthly Interest	4,884	4,847	4,810	4,773	4,736	4,699	4,661	4,624	4,586	4,548	4,510	4,472
Yearly Payment												176,259
Yearly Principal												120,107
Yearly Interest		,						,				56,152
Depreciation	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052
Yearly Depreciation			-									96,630

Capital Cost (\$)												
Interest Rate												
Loan Period (Years)												
Year												23
Month	265	266	267	268	269	270	271	272	273	274	275	276
Monthly Payment	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688
Monthly Principal	10,255	10,293	10,332	10,370	10,409	10,448	10,487	10,527	10,566	10,606	10,646	10,686
Monthly Interest	4,434	4,395	4,357	4,318	4,279	4,240	4,201	4,161	4,122	4,082	4,043	4,003
Yearly Payment												176,259
Yearly Principal												125,625
Yearly Interest												50,634
Depreciation	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052
Yearly Depreciation					-144		4		-3		-	96,630

Capital Cost (\$) Interest Rate												
Loan Period (Years)												
Year												24
Month	277	278	279	280	281	282	283	284	285	286	287	288
Monthly Payment	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688
Monthly Principal	10,726	10,766	10,806	10,847	10,887	10,928	10,969	11,010	11,052	11,093	11,135	11,176
Monthly Interest	3,963	3,922	3,882	3,841	3,801	3,760	3,719	3,678	3,637	3,595	3,554	3,512
Yearly Payment												176,259
Yearly Principal												131,396
Yearly Interest										1		44,863
Depreciation	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052
Yearly Depreciation				-				-		1		96,630

Capital Cost (\$)												
Interest Rate												
Loan Period (Years)												
Year												25
Month	289	290	291	292	293	294	295	296	297	298	299	300
Monthly Payment	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688
Monthly Principal	11,218	11,260	11,303	11,345	11,388	11,430	11,473	11,516	11,559	11,603	11,646	11,690
Monthly Interest	3,470	3,428	3,386	3,343	3,301	3,258	3,215	3,172	3,129	3,086	3,042	2,998
Yearly Payment												176,259
Yearly Principal												137,432
Yearly Interest		·										38,827
Depreciation	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052
Yearly Depreciation		1		-								96.630

Capital Cost (\$)												
Interest Rate												
Loan Period (Years)												
Year												26
Month	301	302	303	304	305	306	307	308	309	310	311	312
Monthly Payment	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688
Monthly Principal	11,734	11,778	11,822	11,866	11,911	11,955	12,000	12,045	12,090	12,136	12,181	12,227
Monthly Interest	2,955	2,911	2,866	2,822	2,778	2,733	2,688	2,643	2,598	2,553	2,507	2,461
Yearly Payment												176,259
Yearly Principal												143,746
Yearly Interest	1,	, بر ا	,		,			, *	) 	,		. 32,513
Depreciation	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052
Yearly Depreciation	* * '	1 - 4	1	·	*		111111111111111111111111111111111111111	····	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		***************************************	96,630

Capital Cost (\$)												
Interest Rate												
Loan Period (Years)												
Year												27
Month	313	314	315	316	317	318	319	320	321	322	323	324
Monthly Payment	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688
Monthly Principal	12,273	12,319	12,365	12,411	12,458	12,505	12,552	12,599	12,646	12,693	12,741	12,789
Monthly Interest	2,415	2,369	2,323	2,277	2,230	2,184	2,137	2,090	2,042	1,995	1,947	1,900
Yearly Payment												176,259
Yearly Principal												150,349
Yearly Interest 🔻 🔭				,	۸.							25,910
Depreciation	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052
Yearly Depreciation		1							,		4	96.630

Capital Cost (\$)												
Interest Rate												
Loan Period (Years)												
Year												28
Month	325	326	327	328	329	330	331	332	333	334	335	336
Monthly Payment	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688
Monthly Principal	12,837	12,885	12,933	12,982	13,030	13,079	13,128	13,177	13,227	13,276	13,326	13,376
Monthly Interest	1,852	1,804	1,755	1,707	1,658	1,609	1,560	1,511	1,461	1,412	1,362	1,312
Yearly Payment												176,259
Yearly Principal												157,256
Yearly Interest	1		1 1/4	,			3 "					19,003
Depreciation	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052
Yearly Depreciation			1 11		,	4			-			96,630

Capital Cost (\$) Interest Rate Loan Period (Years)												
Year												29
Month	337	338	339	340	341	342	343	344	345	346	347	348
Monthly Payment	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688
Monthly Principal	13,426	13,477	13,527	13,578	13,629	13,680	13,731	13,783	13,834	13,886	13,938	13,991
Monthly Interest	1,262	1,212	1,161	1,110	1,059	1,008	957	906	854	802	750	698
Yearly Payment												176,259
Yearly Principal												164,481
Yearly Interest										;		11,778
Depreciation	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052
Yearly Depreciation												96,630

Capital Cost (\$) Interest Rate													
Loan Period (Years)													
Year												30	
Month	349	350	351	352	353	354	355	356	357	358	359	360	
Monthly Payment	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	14,688	5,287,774
Monthly Principal	14,043	14,096	14,149	14,202	14,255	14,308	14,362	14,416	14,470	14,524	14,579	14,633	2,898,892
Monthly Interest	645	592	540	487	433	380	326	272	218	164	110	55	2,388,882
Yearly Payment												176,259	5,287,774
Yearly Principal												172,037	2,898,892
Yearly Interest	j											4,222	2,388,882
Depreciation	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	8,052	2,898,892
Yearly Depreciation	4											96,630	2,898,892

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 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 (10<sup>th</sup>) 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 on 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 5, page 2 of 2

Response to Request 15, page 1 of 2

Response to Request 17, page 2 of 3

Response to Request 17, page 3 of 3

Response to Request 18b, page 2 of 3

# PSC Request 5

Page 2 of 2

Cooperative	Year Ending April 2011	Year Ending April 2012	Year Ending April 2013	3-year average	5% Election	15% Election
Big Sandy	75 2	61 8	61 3	66 1	3 3	9 9
Blue Grass	331 7	278 2	298 7	302 9	15.1	45 4
Clark	126 8	102.7	110 0	113.2	5 7	17.0
<b>Cumberland Valley</b>	139 8	118 1	114 7	124.2	6 2	18.6
Farmers	119 2	98 9	107 5	108 5	5 4	16.3
Fleming Mason	162 3	150.0	159.4	157 2	7 9	23.6
Grayson	69 2	56 3	59.8	618	3 1	9 3
Inter-County	135 7	111 8	118 2	121.9	61	18 3
Jackson	278.8	219 8	229 5	242.7	12 1	36.4
Licking Valley	74.0	59.4	61 3	64 9	3.2	9 7
Nolin	184 9	163 1	175 2	174 4	87	26 2
Owen	406 8	391 1	372 6	390 2	19 5	58 5
Salt River	255.0	241.2	241 0	245.8	12 3	36 9
Shelby	104 3	89 7	94 5	96.2	48	14.4
South Kentucky	366 8	304 3	320 9	330.7	16 5	49.6
Taylor	127 2	105 0	112 9	115 0	5 8	17 3
Total (MW)	2,801	2,419	2,563	2,594	129.7	

		Notice of			
Соор	Project	Intent	Status	MW	Technology
Jackson	Wellhead McKee	NA	Operational 2011	0 375	NG RICE
Jackson	Wellhead Campground	10/11/12	Withdrawn 08/07/ 2013	10	NG RICE
Jackson	Wellhead Fall Rock	03/01/12	Withdrawn 08/07/2013	10	NG RICE
Jackson	Irvine LFGTE	03/15/12	Operational 10/2013	1.6	LFG RICE
Jackson	OMU PPA	09/01/10	Withdrawn	40 0	PPA
Jackson	Dupree Energy Sys	05/15/14	COD 12/2014	10	NG RICE
Farmers	Federal Mogul DG	05/02/13	Operational	3 6	Diesel RICE
Farmers	Glasgow LFGTE	05/02/13	COD 11/2015	10	LFG RICE
Grayson	Magnum Drilling	06/22/12	Amended 08/09/2012	10.7	NG RICE
Grayson	Magnum Drilling	08/09/12	Deficient/No Action (GRECC request)	5 0	NG RICE
Grayson	Magnum Drilling	09/09/13	Deficient/No Action (GRECC request)	44	NG RICE
Grayson	Duke PPA	09/26/13	Nonconforming-rejected	10 0	PPA
Salt River	Lock 7	7/17/13	PJM B-T-M	20	Hydro
Owen	NuFranc	10/29/10	Withdrawn	10	PV
Owen	NuFranc	02/18/11	Withdrawn 12/14/2011	10	PV

**PSC Request 15** 

Page 1 of 2

# 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:** 

**David Crews** 

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 2 00% escalation per year O&M Costs Table provided in Exhibit 9 2 5% escalation per year

O&M Costs Table provided in Exhibit 9 2 5% esca 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

**PSC Request 17** 





BILLED TO

Farmer's RECC P O Box 1298

Glasgow, Kentucky 42142-1298

**INVOICE NUMBER** 

IN00387

Phone No 270-651-2191

Fax No 270-651-7332

INVOICE DATE VENDOR #

11/1/2014 CO3400

QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
KW CAPACITY	CAPACITY CHARGE PER CONTRACT DATED AUGUST 13, 2014 BETWEEN EKPC AND FARMERS RURAL ELECTRIC	RATE PER KW	
1,000		\$38 36	\$38,360 00
	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		

# **PSC Request 17**

# Page 3 of 3





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 VENDOR #

11/1/2014 CO3400

QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
ммвти	OCTOBER 2014 METHANE GAS USAGE FOR GLASGOW LFGTE FACILITY	RATE PER MMBTU	
12,057		\$	\$
	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

\$

In an effort to smooth out these varying maintenance costs, the Farmers capacity payment is based on a six year average.

Request 18b. Explain why the generation costs for the Glasgow LFGTE facility differ significantly from the generation costs of EKPC's existing landfill units

Response 18b. Glasgow LFGTE facility will be a one engine facility with a capacity of 1 MW Generally EKPC LFGTE facilities have been 2.4 to 3.2 MW facilities and built at an average cost of approximately \$1300/kW The Glasgow LFGTE facility is estimated to cost \$2900/kW. These fixed costs are the driving factor on the high cost of generation for this facility

Request 18c. Provide the generation costs for each of EKPC's existing generating units, including its coal and natural gas units.

**Response 18c.** See table on page three of this response

# 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 1 of 4

Response to Request 2a, page 2 of 4

Response to Request 2b, page 3 of 4

Response to Request 2d, page 4 of 4

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

# COMMISSION STAFF'S SECOND REQUEST FOR INFORMATION DATED 11/10/14 REQUEST 2

**RESPONSIBLE PARTY:** 

Jeff Brandt

**Request 2.** Refer to the response to Item 15 of Staff's First Request, page 2 of 2.

Request 2a. For the year 2015, provide each of the calculations described on this page.

Response 2a. For the year 2015.

Capacity Charge = (O&M + Depreciation Expense + (Interest Rate \* TIER \* NBV))/kW/months

O&M (\$)	148,000
Depreciation Expense (\$)	96,630
Interest Rate (%)	4 5
TIER (Times Interest Earned Ratio)	1 5
NBV (Net Book Value of Asset)	2,802,262
kW	1000
months	12

Capacity Charge = (148,000 + 96,630 + (0.045 \* 1.5 \* 2,802,262)/1000/12 = \$36.15/kW-month

Capacity Charge Average for first 6-year term = (36 15+35.91+38 40+35.47+35.25+49.01)/6 = \$38 36/kW-month

# PSC Request 2

Page 2 of 4

FRECC Cost of Energy (COE) = Total Cost / Generation = (0&M + Depreciation Expense + (Interest Rate * TIER * NBV) + Fuel Cost) / Net Generation = (148,000 + 96,630 + (0 045 * 1.5 * 2,802,262) + (148,000 + 96,630 + (0 045 * 1.5 * 2,802,262) + (148,000 + 96,630 + (0 045 * 1.5 * 2,802,262) + (148,000 + 96,630 + (0 045 * 1.5 * 2,802,262) + (148,000 + 96,630 + (0 045 * 1.5 * 2,802,262) + (148,000 + 96,630 + (0 045 * 1.5 * 2,802,262) + (148,000 + 96,630 + (0 045 * 1.5 * 2,802,262) + (148,000 + 96,630 + (0 045 * 1.5 * 2,802,262) + (148,000 + 96,630 + (0 045 * 1.5 * 2,802,262) + (148,000 + 96,630 + (0 045 * 1.5 * 2,802,262) + (148,000 + 96,630 + (0 045 * 1.5 * 2,802,262) + (148,000 + 96,630 + (0 045 * 1.5 * 2,802,262) + (148,000 + 96,630 + (0 045 * 1.5 * 2,802,262) + (148,000 + 96,630 + (0 045 * 1.5 * 2,802,262) + (148,000 + 96,630 + (0 045 * 1.5 * 2,802,262) + (148,000 +
FRECC COE Average for first 6-year term = //MWh
Demand Charge Savings = Substation Demand Charge * kW Capacity Reduction * months/year = 6 02 * 1000 * 12 = \$72,240/year
FRECC COE including demand charge savings = (O&M + Depreciation Expense + (Interest Rate * TIER * NBV) + Fuel Cost – Demand Charge Savings)/ Net Generation = (148,000 + 96,630 + (0.045 * 1.5 * 2,802,262) + -72,240) / 7,489.800 /MWh
FRECC COE including demand charge savings average for first 6-year term  6  /MWh
FRECC COE including demand charge savings and Renewable Energy Credit Value = (0&M + Depreciation Expense + (Interest Rate * TIER * NBV) + Fuel Cost – Demand Charge Savings – REC Value)/ Net Generation = (148,000 + 96,630 + (0.045 * 1.5 * 2,802,262) + - 72,240-112,347) / 7,489 800 / MWh
FRECC COE including demand charge savings and REC value average for first 6-year term  /6  /MWh

### **PSC Request 2**

Page 3 of 4

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 . This was compared to the EKPC 2013 Financial Forecast all-in Cost to Members of

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.

## **PSC Request 2**

Page 4 of 4

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

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

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