



PPL companies

Mr. Jeff DeRouen  
Executive Director  
Kentucky Public Service Commission  
211 Sower Boulevard  
Frankfort, Kentucky 40601

RECEIVED

JUN 15 2011

PUBLIC SERVICE  
COMMISSION

**LG&E and KU Energy LLC**  
State Regulation and Rates  
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June 15, 2011

**RE: *Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for Review, Modification, and Continuation of Existing, and Addition of New, Demand-Side Management and Energy-Efficiency Programs - Case No. 2011-00134***

Dear Mr. DeRouen:

Please find enclosed and accept for filing the original and ten (10) copies of the response of Louisville Gas and Electric Company and Kentucky Utilities Company to the Commission Staff's First Information Request dated June 1, 2011, in the above-referenced matter.

Should you have any questions regarding the enclosed, please contact me at your convenience.

Sincerely,

A handwritten signature in black ink that reads "Rick E. Lovekamp". The signature is written in a cursive, flowing style.

Rick E. Lovekamp

cc: Parties of Record

**COMMONWEALTH OF KENTUCKY**  
**BEFORE THE PUBLIC SERVICE COMMISSION**

**In the Matter of:**

<b>JOINT APPLICATION OF LOUISVILLE GAS AND</b>	)
<b>ELECTRIC COMPANY AND KENTUCKY UTILITIES</b>	)
<b>COMPANY FOR REVIEW, MODIFICATION, AND</b>	)
<b>CONTINUATION OF EXISTING, AND ADDITION OF NEW</b>	)
<b>DEMAND-SIDE MANAGEMENT AND ENERGY-</b>	)
<b>EFFICIENCY PROGRAMS</b>	)

**CASE NO.**  
**2011-00134**

**RESPONSE OF**  
**LOUISVILLE GAS AND ELECTRIC COMPANY**  
**AND**  
**KENTUCKY UTILITIES COMPANY**  
**TO THE COMMISSION STAFF'S FIRST INFORMATION REQUEST**  
**DATED JUNE 1, 2011**

**FILED: June 15, 2011**

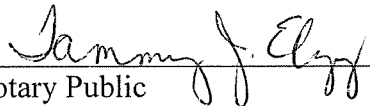
VERIFICATION

COMMONWEALTH OF KENTUCKY )  
 ) SS:  
COUNTY OF JEFFERSON )

The undersigned, **Lonnie E. Bellar**, being duly sworn, deposes and says that he is Vice President, State Regulation and Rates for Louisville Gas and Electric Company and Kentucky Utilities Company and an employee of LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

  
\_\_\_\_\_  
**Lonnie E. Bellar**

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 15<sup>th</sup> day of June 2011.

 (SEAL)  
\_\_\_\_\_  
Notary Public

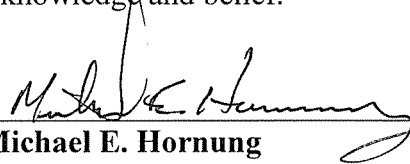
My Commission Expires:

November 9, 2014

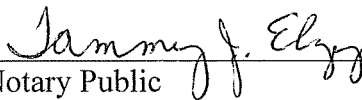
VERIFICATION

COMMONWEALTH OF KENTUCKY )  
 ) SS:  
COUNTY OF JEFFERSON )

The undersigned, **Michael E. Hornung**, being duly sworn, deposes and says that he is Manager of Energy Efficiency Planning & Development for LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

  
Michael E. Hornung

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 15<sup>th</sup> day of June 2011.

 (SEAL)  
Notary Public

My Commission Expires:

November 9, 2014



**LOUISVILLE GAS AND ELECTRIC COMPANY  
KENTUCKY UTILITIES COMPANY**

**Response to the Commission Staff's First Information Request  
Dated June 1, 2011**

**Case No. 2011-00134**

**Question No. 1**

**Witness: Lonnie E. Bellar**

- Q-1. Refer to page 11 of the Companies' April 14, 2011 application ("Application"). The Companies request an additional component to the Demand Side Management ("DSM") Cost Recovery Component ("DSMRC"). The additional component is the DSM Capital Cost Recovery ("DCCR"). The proposed component would allow the Companies to earn an approved return on equity exclusively for capital expenditures. The proposed return on equity is 10.50 percent.
- a. In Exhibit LEB-3, the rate of return is 10.70 percent for LG&E electric and 10.70 percent for LG&E gas.
- (1) Provide the outstanding balances for long-term debt, short term debt, preferred stock, common equity and the as-of date that supports the 10.70 percent rate of return. Provide this information on a total company and Kentucky jurisdictional basis.
  - (2) Provide the blended interest rates for long-term debt, short-term debt and preferred stock. Include all supporting calculations showing how these blended interest rates were determined. If applicable, provide the blended interest rates on a total and Kentucky jurisdictional basis. For each outstanding debt listed, indicate whether the interest rate is fixed or variable.
  - (3) Provide LG&E's calculation of its weighted average cost of capital for DSM purposes.
- b. In Exhibit LEB-3, the rate of return for KU is 10.32 percent.
- (1) Provide the outstanding balances for long-term debt, short-term debt, preferred stock, common equity and the as-of date that supports the 10.32 percent rate of return. Provide this information on a total company and Kentucky jurisdictional basis.

- (2) Provide the blended interest rates for long-term debt, short-term debt and preferred stock. Include all supporting calculations showing how these blended interest rates were determined. If applicable, provide the blended interest rates on a total and Kentucky jurisdictional basis. For each outstanding debt listed, indicate whether the interest rate is fixed or variable.
- (3) Provide KU's calculation of its weighted average cost of capital for DSM purposes.

A-1. a. (1) Louisville Gas and Electric Company ("LG&E") utilized balances as of November 2010 and the following information to calculate the weighted average cost of capital ("WACC"):

	<b>Adjusted Kentucky Jurisdictional Capitalization</b>	<b>Adjusted Capital Structure</b>	<b>Annual Cost Rate</b>	<b>Cost of Capital</b>
Short Term Debt	\$143,641,132	6.71%	2.88%	0.19%
Long Term Debt	833,682,696	38.92%	4.19%	1.63%
Common Equity	1,164,780,838	54.37%	10.50	5.71%
Total Capitalization	\$2,142,104,665	100.00%		
Rate of Return (ROR)				7.53%
Composite Debt Rate (DR)				1.82%
Composite Tax Rate (TR)				35.71%
WACC Grossed up for Income Taxes*				10.70%

$$* \{ROR + (ROR - DR) \times [TR/(1-TR)]\}$$

LG&E is proposing to use the year ending capitalization balances in the computation of the annual DSM balancing adjustment.

- (2) See attached schedule.
- (3) See response to Question No. 1(a)(1).

- b. (1) Kentucky Utilities Company (“KU”) utilized balances as of November 2010 and the following information to calculate the weighted average cost of capital (“WACC”):

	<b>Adjusted Kentucky Jurisdictional Capitalization</b>	<b>Adjusted Capital Structure</b>	<b>Annual Cost Rate</b>	<b>Cost of Capital</b>
Short Term Debt	-	0.00%	0.00%	0.00%
Long Term Debt	1,598,029,538	47.58%	3.69%	1.76%
Common Equity	1,760,722,545	52.42%	10.50	5.50%
Total Capitalization	\$3,358,752,083	100.00%		
Rate of Return (ROR)				7.26%
Composite Debt Rate (DR)				1.76%
Composite Tax Rate (TR)				35.71%
WACC Grossed up for Income Taxes*				10.32%

$$* \{ROR + (ROR - DR) \times [TR/(1-TR)]\}$$

KU is proposing to use the year ending capitalization balances in the computation of the annual DSM balancing adjustment.

- (2) See attached schedule.
- (3) See response to Question No. 1(b)(1).



LOUISVILLE GAS AND ELECTRIC COMPANY  
ANALYSIS OF THE EMBEDDED COST OF CAPITAL

Attachment to KPSC Question No. 1(a)(2)

Page 1 of 1

Bellair

November 2010

**LONG-TERM DEBT**

	Due	Rate	Principal	Interest/(Income)	Annualized Cost			Letter of Credit and other fees	Total	Embedded Cost
					Amortized Debt Exp/Discount	Amortized Loss-Reacquired Debt				
Pollution Control Bonds -										
Jefferson Co 2000 Series A	05/01/27	5.375% * Fixed	\$ 25,000,000	\$ 1,343,750	\$ -	\$ 117,881	\$ -	\$ 1,461,631	\$ 1,461,631	5.847%
Trimble Co 2000 Series A	08/01/30	0.500% * Variable	83,335,000	416,675	38,707	143,700	305,898	904,980	904,980	1.086%
Jefferson Co 2001 Series A	09/01/27	0.475% * Variable	10,104,000	47,994	20,393	-	35,546	103,933	103,933	1.029%
Jefferson Co 2001 Series A	09/01/26	1.000% * Variable	22,500,000	225,000	9,924	77,424	22,500	334,848	334,848	1.488%
Trimble Co 2001 Series A	09/01/26	0.550% * Variable	27,500,000	151,250	10,790	65,400	27,500	254,940	254,940	0.927%
Jefferson Co 2001 Series B	11/01/27	0.750% * Variable	35,000,000	262,500	10,995	49,056	35,000	357,551	357,551	1.022%
Trimble Co 2001 Series B	11/01/27	0.750% * Variable	35,000,000	262,500	10,997	48,864	35,000	357,361	357,361	1.021%
Trimble Co 2002 Series A	10/01/32	0.528% * Variable	41,665,000	219,991	37,221	55,812	176,056	489,080	489,080	1.174%
Louisville Metro 2003 Series A	10/01/33	0.340% * Variable	128,000,000	435,200	-	313,727	-	748,927	748,927	0.585%
Louisville Metro 2003 Series A	10/01/33	0.340% * Variable	(128,000,000)	(435,200)	-	-	-	(435,200)	(435,200)	0.340%
Louisville Metro 2005 Series A	02/01/35	5.750% * Fixed	40,000,000	2,300,000	-	-	96,444	2,396,444	2,396,444	5.991%
Trimble Co 2007 Series A	06/01/33	4.600% Fixed	60,000,000	2,760,000	47,534	6,615	18,270	2,832,419	2,832,419	4.721%
Louisville Metro 2007 Series A	06/01/33	5.625% * Fixed	31,000,000	1,743,750	-	-	41,718	1,785,468	1,785,468	5.760%
Louisville Metro 2007 Series B	06/01/33	0.400% * Variable	35,200,000	140,800	-	27,526	-	168,326	168,326	0.478%
Louisville Metro 2007 Series B	06/01/33	0.400% * Variable	(35,200,000)	(140,800)	-	-	-	(140,800)	(140,800)	0.400%
Called Bonds			-	-	-	167,868	-	167,868	167,868	0.000%
First Mortgage Bonds -										
2010 due 2015	11/15/15	1.625% Fixed	250,000,000	4,062,500	247,552	-	-	4,310,052	4,310,052	1.724%
2010 due 2020	11/15/40	5.125% Fixed	285,000,000	14,606,250	94,793	-	-	14,701,043	14,701,043	5.158%
<b>Total External Debt</b>			<b>\$ 946,104,000</b>	<b>\$ 28,402,160</b>	<b>\$ 528,906</b>	<b>\$ 1,212,035</b>	<b>\$ 655,770</b>	<b>\$ 30,798,871</b>	<b>\$ 30,798,871</b>	<b>3.255%</b>
Interest Rate Swaps:										
JP Morgan Chase Bank	11/01/20			\$ 4,352,404	\$ -	\$ -	\$ -	\$ 4,352,404	\$ 4,352,404	
Morgan Stanley Capital Services	10/01/33			1,114,957	-	-	-	1,114,957	1,114,957	
Morgan Stanley Capital Services	10/01/33			1,111,117	-	-	-	1,111,117	1,111,117	
Bank of America	10/01/33			1,127,117	-	-	-	1,127,117	1,127,117	
<b>Interest Rate Swaps External Debt</b>				<b>\$ 7,705,595</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 7,705,595</b>	<b>\$ 7,705,595</b>	<b>0.814%</b>
Notes Payable to PPL										
			\$ -	\$ 1,110,075	\$ -	\$ -	\$ -	\$ 1,110,075	\$ 1,110,075	
<b>Total Internal Debt</b>			<b>\$ -</b>	<b>\$ 1,110,075</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,110,075</b>	<b>\$ 1,110,075</b>	<b>0.117%</b>
<b>Total</b>			<b>\$ 946,104,000</b>	<b>\$ 37,217,830</b>	<b>\$ 528,906</b>	<b>\$ 1,212,035</b>	<b>\$ 655,770</b>	<b>\$ 39,614,541</b>	<b>\$ 39,614,541</b>	<b>4.187%</b>

**SHORT TERM DEBT**

	Maturity	Rate	Principal	Annualized Cost				Total	Embedded Cost
				Interest	Expense	Loss	Premium		
Notes Payable to Associated Company	NA	0.250% *	\$ -	\$ 1,281	\$ -	\$ -	\$ -	\$ 1,281	
Revolving Credit		2.260%	163,000,000	3,683,800	\$ 1,007,250	-	-	4,691,050	2.878%
<b>Total</b>			<b>\$ 163,000,000</b>	<b>\$ 3,685,081</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 4,692,331</b>	<b>2.879%</b>

Embedded Cost of Total Debt **\$ 1,109,104,000** **\$ 40,902,911** **\$ 528,906** **\$ 1,212,035** **\$ 655,770** **\$ 44,306,872** **3.995%**

\* Composite rate at end of current month

\*\* Includes debt discount

1 Additional interest due to Swap Agreements:

Underlying Debt Being Hedged	Notional Amount	Expiration of Swap Agreement	Fixed LG&E Swap Position	Fixed LG&E Swap Position	Variable Counterparty Swap Position
Series Z - PCB	83,335,000	11/01/20	5.495%	5.495%	BMA Index
Series GG - PCB	32,000,000	10/01/33	3.657%	3.657%	68% of 1 mo LIBOR
Series GG - PCB	32,000,000	10/01/33	3.645%	3.645%	68% of 1 mo LIBOR
Series GG - PCB	32,000,000	10/01/33	3.695%	3.695%	68% of 1 mo LIBOR
	179,335,000				

2 Call premium and debt expense is being amortized over the remaining life of bonds due 6/1/15, 7/1/13 and 8/1/17

3 Reacquired bonds, which net to zero as they are also included in Short Term Debt Notes Payable to Associated Company

4 Remarketed bonds, issued at long term fixed rate

5 Fidelity Notes Payable were paid off on 11/1/2010 with PPL Notes Payable that were paid off with the new FMB issues on 11/16/2010

6 Money Pool with LKE was paid off on 11/4/2010 with revolving credit loan

a - Insurance premiums annualized - based on actual invoices

b - Remarketing fee = 10 basis points

c - Remarketing fee = 25 basis points

d - Combination of a and c

KENTUCKY UTILITIES COMPANY  
ANALYSIS OF THE EMBEDDED COST OF CAPITAL  
November 2010

<b>LONG-TERM DEBT</b>											
	Due	Rate	Principal	Annualized Cost							Embedded Cost
				Interest	Amortized Debt Issuance Exp/Discount	Amortized Loss-Reacquired Debt	Letter of Credit and other fees	Total			
<b>Pollution Control Bonds -</b>											
Mercer Co 2000 Series A	05/01/23	0.400000% * Variable	\$ 12,900,000	\$ 51,600	\$ -	\$ 46,743	\$ 306,728 a	\$ 405,071		3.140%	
Carroll Co 2002 Series A	02/01/32	0.700000% * Variable	20,930,000	146,510	4,104	36,300	20,930 b	207,844		0.993%	
Carroll Co 2002 Series B	02/01/32	0.700000% * Variable	2,400,000	16,800	2,856	4,164	2,400 b	26,220		1.093%	
Muhlenberg Co 2002 Series A	02/01/32	0.700000% * Variable	2,400,000	16,800	1,140	12,744	2,400 b	33,084		1.379%	
Mercer Co 2002 Series A	02/01/32	0.700000% * Variable	7,400,000	51,800	3,180	12,900	7,400 b	75,280		1.017%	
Carroll Co 2002 Series C	10/01/32	0.528000% * Variable	96,000,000	506,880	73,658	186,036	240,000 c	1,006,574		1.049%	
Carroll Co 2004 Series A	10/01/34	0.350000% * Variable	50,000,000	175,000	-	105,023	1,194,418 a	1,474,441		2.949%	
Carroll Co 2006 Series B	10/01/34	0.350000% * Variable	54,000,000	189,000	47,920	-	1,291,469 a	1,528,389		2.830%	
Carroll Co 2007 Series A	02/01/26	5.750000% * Fixed	17,875,000	1,027,813	33,342	-	-	1,061,155		5.937%	
Trimble Co 2007 Series A	03/01/37	6.000000% * Fixed	8,927,000	535,620	16,072	-	-	551,692		6.180%	
Carroll Co 2008 Series A	02/01/32	0.350000% * Variable	77,947,405	272,816	34,400	-	1,864,197 a	2,171,413		2.786%	
Called Bonds			-	-	-	201,063	1	201,063		0.000%	
<b>First Mortgage Bonds -</b>											
2010 due 2015	11/01/15	1.625000% Fixed	250,000,000	4,062,500	248,303 **	-	-	4,310,803		1.724%	
2010 due 2020	11/01/20	3.250000% Fixed	500,000,000	16,250,000	262,401 **	-	-	16,512,401		3.302%	
2010 due 2040	11/01/40	5.125000% Fixed	750,000,000	38,437,500	246,800 **	-	-	38,684,300		5.158%	
<b>Total External Debt</b>			<b>\$ 1,850,779,405</b>	<b>\$ 61,740,639</b>	<b>\$ 974,176</b>	<b>\$ 604,973</b>	<b>\$ 4,929,942</b>	<b>\$ 68,249,731</b>		<b>3.688%</b>	
Notes Payable to PPL			\$ -	\$ 3,048,256	\$ -	\$ -	\$ -	\$ -		0.000%	
<b>Total Internal Debt</b>			<b>\$ -</b>	<b>\$ 3,048,256</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>		<b>0.000%</b>	
<b>Total</b>			<b>\$ 1,850,779,405</b>	<b>\$ 64,788,895</b>	<b>\$ 974,176</b>	<b>\$ 604,973</b>	<b>\$ 4,929,942</b>	<b>\$ 68,249,731</b>		<b>3.688%</b>	

<b>SHORT TERM DEBT</b>										
	Rate	Principal	Annualized Cost					Embedded Cost		
			Interest	Expense	Loss	Premium	Total			
Notes Payable to Associated Company	0.2500% *	\$ -	\$ 10,261	\$ -	\$ -	\$ -	\$ 10,261	0.000%		
Revolving Credit Account		-	-	1,007,250	-	-	1,007,250	0.000%		
<b>Total</b>		<b>\$ -</b>	<b>\$ 10,261</b>	<b>\$ 1,007,250</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,017,511</b>	<b>0.000%</b>		

Embedded Cost of Total Debt **\$ 1,850,779,405** **\$ 64,788,895** **\$ 1,981,426** **\$ 604,973** **\$ 4,929,942** **\$ 69,267,242** **3.743%**

\* Composite rate at end of current month  
\*\* Includes debt discount

1 Series P and R bonds were redeemed in 2003, and 2005, respectively. They were not replaced with other bond series. The remaining unamortized expense is being amortized over the remainder of the original lives (due 5/15/07, 6/1/25, 6/1/35, and 6/1/36 respectively) of the bonds as loss on reacquired debt.

2 Fidelity Notes Payable were paid off on 11/1/2010 with PPL Notes Payable that were paid off with the new FMB issues on 11/16/2010.

3 Money Pool with LKE was paid off on 11/16/2010 with new FMB issues.

a - Letter of credit fee = (principal bal + 45 days interest)\*2% L/C Fee and 25% L/C Fronting Fee. Rate based on company credit rating. Remarketing Fee = 10 basis points  
b - Remarketing fee = 10 basis points  
c - Remarketing fee = 25 basis points



**LOUISVILLE GAS AND ELECTRIC COMPANY**  
**KENTUCKY UTILITIES COMPANY**

**Response to the Commission Staff's First Information Request**  
**Dated June 1, 2011**

**Case No. 2011-00134**

**Question No. 2**

**Witness: Lonnie E. Bellar**

- Q-2. Refer to pages 7 through 9 of the testimony of Mr. Lonnie E. Bellar ("Bellar Testimony"). In this filing, the Companies are proposing that new load control switches and programmable thermostats be recorded as capital costs as part of the Residential and Commercial Load Control program. These costs are to be capitalized in Account 397 - Communications Equipment. The depreciation rate for Communication Equipment for LG&E is 12 percent for an average life of eight years. The depreciation rate for Communication Equipment for KU is 7.13 percent for an average life of 14 years.
- a. What is the estimated useful life of load control switches and programmable thermostats? Explain.
  - b. How were the costs of load control switches and programmable thermostats captured and recovered in prior DSM filings? Explain.
  - c. If, in prior filings, load control switches and programmable thermostats were not capitalized but the costs were recovered as other DSM costs, explain in detail why these costs are being capitalized now.
  - d. Fully explain why LG&E and KU have different depreciation rates for Account 397 - Communication Equipment.
  - e. Are the load control switches and programmable thermostats that are installed for all LG&E and KU customers identical in all aspects (i.e, costs, function, etc.)? If so, fully explain why they should not be depreciated at the same rate.
- A-2. a. The average expected lifetime for load-control switches and programmable thermostats is estimated to be ten to fifteen years. The depreciation life of load control switches and programmable thermostats for LG&E is eight years and fourteen years for KU.

- b. To date the Companies have accounted for the costs of load control switches and programmable thermostats as an expense and recovered the cost through the DSM Cost Recovery Mechanism.
- c. The Companies believe it is more appropriate to start recording the costs of load control switches and programmable thermostats as capital costs to appropriately match the costs with benefits over time and, coincidentally, reduce the bill impact of the proposed Load Control Program.
- d. Account 397 – Communication Equipment contains assets of varying lives. Depreciation is on a group basis wherein one overall rate that reasonably matches the life of the group is used. The past life characteristics for Account 397 differ between the two utilities since these two Companies have not had identical recovery patterns in the past. The depreciation rate as calculated by our depreciation consultant, Gannett Fleming, Inc., is based on four parameters. These parameters include the interim survivor curve, the net salvage component, the depreciation procedure, and reserve to plant ratio and the age of the surviving age distribution at the time of the calculation. If any one of these four factors is different, then the depreciation rate will not be equal between the Companies. Depreciation rates for Account 397 were approved by the Commission in Case No. 2007-00564 for Louisville Gas and Electric Company and Case No. 2007-00565 for Kentucky Utilities Company.
- e. Yes, the same load control switches and programmable thermostats are utilized in the LG&E and KU service territories.



**LOUISVILLE GAS AND ELECTRIC COMPANY  
KENTUCKY UTILITIES COMPANY**

**Response to the Commission Staff's First Information Request  
Dated June 1, 2011**

**Case No. 2011-00134**

**Question No. 3**

**Witness: Lonnie E. Bellar**

Q-3. Refer to page 10 of the Bellar Testimony.

- a. Mr. Bellar states that operation and maintenance expenses ("O&M") associated with the load control switches and programmable thermostats are to be captured in Account 908005. In the next base rate case, will the DSM related O&M costs captured in Account 908005, and recovered thru the DSM rate, be removed from the test year O&M costs? Explain.
- b. According to Mr. Bellar, the initial installation cost of the load control switches and programmable thermostats will be capitalized with each device. Exhibit LEB-3, pages 1 thru 9, includes the capital cost of load control switches and programmable thermostats for LG&E electric and gas, and also KU electric. Also, Exhibit LEB-3, pages 1 thru 9, includes rate base, return on rate base, O&M, depreciation expense, and annual property tax rate. The following table includes information from Exhibit LEB-3, pages 1 thru 9.

<u>Description</u>	<u>Annual Cash Flow</u>	<u>Operating Expense (O&amp;M)</u>	<u>Annual Depreciation Expense</u>
LG&E Electric Residential Project 1	\$987,648	\$1,813,750	\$118,518
LG&E Electric Commercial Project 2	\$51,659	\$94,400	\$6,199
LG&E Gas Residential Project 1	\$536,747	\$985,700	\$64,410
LG&E Gas Commercial Project 2	\$27,991	\$51,150	\$3,359
KU Electric Residential Project 1	\$1,524,395	\$2,799,450	\$108,689
KU Electric Commercial Project 2	\$79,650	\$145,549	\$5,679
Total	\$3,208,090	\$5,889,999	\$306,854

- (1) If the annual cash flow column represents capital costs for 2011, does that amount include the cost of equipment and initial installation? Explain.
  - (2) In Exhibit MEH-1, Volume I , page 24, Table 1.9.1, Residential Annual Program Budget, and Table 1.9.2, Commercial Annual Program Budget Program, capital expenditures are listed for the Residential Load Management (Table 1.9.1) program and the Commercial Load Management (Table 1.9.2) program. The capital expenditures for the Residential Load Management program on Table 1.9.1 are \$296,000 and the Commercial Load Management program is \$15,000, for a total of \$311,000. Are those capital expenditures the same capital expenditures listed in the above table, but presented as the calculated rate base amount? Explain.
  - (3) Will depreciation expense recovered in the DSM surcharge be removed from the test-year depreciation expense in the base rate case and not be considered in any depreciation study for a base rate case? Explain.
  - (4) Provide a detailed breakdown of the \$5.9 million of O&M as to type of cost and the percentage of O&M and depreciation expense applicable to the various tariffs. Explain.
- A-3.
- a. Yes. Because the DSM is a separate rate mechanism and is recovered separately from customers, all DSM revenues and expenses will be removed from the test year.
  - b. (1) Yes. The annual cash flow column primarily represents the capital cost of the load control switches and thermostats.
  - (2) Yes. The capital expenditure amounts of \$296,000 and \$15,000 referenced in Exhibit MEH-1 are derived by the summation of the return on rate base in Exhibit LEB-3 for the Residential Direct Load Control (“DLC”) for LG&E Electric (\$96,148), LG&E Gas (\$52,253), and KU Electric (\$147,956).
  - (3) Yes. The DSM is a separate rate mechanism and is recovered separately from customers; therefore, all DSM revenues and expenses will be removed from the test year.



(4) The O&M breakdown is as follows:

<b>O&amp;M Expense</b>	<b>Amount</b>
Labor	\$ 373,506
Office Supplies and Expense	16,316
Data Processing	21,755
Advertising	535,500
Maintenance	1,411,935
Customer Incentives	3,159,888
Market Research	20,000
Program Evaluation	60,000
Total	\$ 5,598,900



**LOUISVILLE GAS AND ELECTRIC COMPANY  
KENTUCKY UTILITIES COMPANY**

**Response to the Commission Staff's First Information Request  
Dated June 1, 2011**

**Case No. 2011-00134**

**Question No. 4**

**Witness: Lonnie E. Bellar / Michael E. Hornung**

Q-4. Refer to Exhibit LEB-1 of the Application.

- a. Refer to the schedule "DCR Summary - DSM Budget Allocation" for LG&E and KU. The page lists a total dollar amount of all programs of \$23,011,116. It also lists, by program, the total amount of the program expenditures and percentage allocation to the various tariffs.
  - (1) Confirm that if the total amount would be \$23,011,116, all the total values of the listed programs are summed.
  - (2) It appears that three of the new proposed programs were not included in the All Programs total. Confirm that the following new proposed programs were not included: Smart Energy Profile Program, Residential Incentive Program and the Residential Refrigerator Removal Program.
  - (3) If the three proposed new programs have been excluded in 4.a.(2), provide a revised DCR Summary - DSM Budget Allocation page that includes all programs and percentage allocation of amounts by tariff for each program in electronic format with all formulas intact.

- b. At page 10 of Exhibit LEB-1, the DSM Cost Recovery Component (“DCR”) is listed as \$9,006,362. At page 13 of Exhibit LEB-1, the DSM Lost Sales Component (“DRLS”) is listed as \$10,266,992; and at page 17 of Exhibit LEB-1, the DCCR is listed as \$2,134,043 for the LG&E electric tariffs. See the table below.

Tariff	Case No 2011-00134			Case No 2007-00319	
	Proposed Program Costs	Proposed Capital Cost Recovery Component	Proposed Lost Sales Component	Program Costs	Lost Sales Component
RS, RRP, VFD & LEV	\$6,964,031	\$2,028,416	\$6,358,121	\$8,618,198	\$3,614,374
GS & GRP	\$1,272,575	\$99,004	\$1,929,178	\$827,171	\$1,415,846
LC	\$587,876	\$6,384	\$1,486,084	\$945,513	\$1,357,148
LC-TOD	\$181,880	\$241	\$493,608	\$215,686	\$455,447
Total	\$9,006,362	\$2,134,045	\$10,266,991	\$10,606,568	\$6,842,815

- (1) Explain how the lost sales factor for each tariff was determined.
- (2) The proposed DRLS for Tariff - RS, RRP, VFD & LEV is \$6.4 million and the DRLS in Case No. 2007-00319 was \$3.6 million. Explain the increase in DRLS from Case No. 2007-00319 to the proposed DRLS in the current application.
- (3) The total proposed DRLS of \$10,266,991 is 92 percent of the total of the proposed program costs and capital cost recovery component \$11,140,407 (\$9,006,362 + \$2,134,045). The DRLS, in Case No. 2007-00319, was \$6,842,815 or 65 percent of the program costs of \$10,606,568. Explain the why lost sales as a percentage of program costs have increased by this magnitude from Case No. 2007-00319 to the current application?
- (4) Provide in electronic format with all formulas intact, the proposed Lost Sales of \$10,266,991 by tariff for LG&E.

- c. In Exhibit LEB-1, the DRLS uses total energy savings multiplied by non-variable revenue per kWh to determine the last sales. The table below compares the total energy savings from Case No. 2007-00319 to the total energy savings in the current application for LG&E.

	Case No. 2011-00134	Case No. 2007-00319	Case No. 2011-00134 Estimated Billing	Case No. 2007-00319 Determinants
Tariff	Total Energy Savings (kWh)	Total Energy Savings (kWh)	Forecasted Sales	Forecasted Sales
RS, RRP, VFD, LEV	108,131,314	69,117,414	4,247,555,598	4,253,700,665
GS & GRP	25,417,370	23,483,736	1,592,923,724	1,455,984,948
LC	35,982,662	34,201,940	2,254,666,857	2,305,633,109
LC-TOD	11,951,774	11,376,179	764,417,584	673,919,307
Total	181,483,120	138,179,269	8,863,563,763	8,689,238,029

- (1) Explain the difference of 43,303,851 kWh (181,483,120 kWh - 138,179,269 kWh) in total energy savings for tariff RS, RRP, VFD & LEV from Case No. 2007-00319 to the total energy savings in the current application.
- (2) Is the decrease in forecasted sales for tariff RS, RRP, VFD & LEV from Case No. 2007-00319 to the current application reflective of the projected energy savings of the residential DSM programs or were there other factors to be considered? Explain.

- d. In Exhibit LEB-1, the DSMRC is \$11,443,058. The DSM Lost Sales Component (“DRLS”) is \$8,047,162 and the DSM Capital Cost Recovery Component (“DCCR”) is \$3,215,055 for the KU electric tariffs. See the table below.

Tariff	Case No 2011-00134			Case No 2007-00319	
	Proposed Program Costs	Proposed Capital Cost Recovery Component	Proposed Lost Sales Component	Program Costs	Lost Sales Component
RS, VFD LEV	\$9,121,941	\$3,056,096	\$5,541,570	\$10,291,005	\$2,692,134
GS	\$1,507,270	\$147,343	\$1,637,805	\$950,520	\$945,811
AES	\$33,673	\$0	\$19,303	\$0	\$0
PS, TODP & TODS (LP)	\$780,174	\$11,616	\$848,484	\$1,300,367	\$619,740
Total	\$11,443,058	\$3,215,055	\$8,047,162	\$12,541,892	\$4,257,685

- (1) Explain how the lost sales factor for each tariff was determined.
- (2) The proposed DRLS for Tariff - RS, RRP, VFD & LEV is \$5.5 million and the DRLS in Case No. 2007-00319 was \$2.7 million. Explain the increase in DRLS from Case No. 2007-00319 to the proposed DRLS in the current application.
- (3) The total proposed DRLS of \$8,047,162 is 55 percent of the total of the proposed program costs and capital cost recovery component of \$14,658,113 (\$11,443,058 + \$3,215,055). The DRLS in Case No. 2007-00319 was \$4,257,685 or 34 percent of the program costs of \$12,541,892. Explain the why lost sales as a percentage of program costs have increased by this magnitude from Case No. 2007-00319 to the current application.
- (4) Provide, in electronic format with all formulas intact, the proposed Lost Sales of \$10,266,991 by tariff for LG&E.

- e. In Exhibit LEB-I, the DRLS uses total energy savings multiplied by non-variable revenue per kWh to determine the lost sales. The following table compares the total energy savings from Case No. 2007-00319 to the total energy savings in the current application for KU.

	Case No. 2011-00134	Case No. 2007-00319	Case No. 2011-00134 Estimated Billing	Case No. 2007-00319 Determinants
Tariff	Total Energy Savings (kWh)	Total Energy Savings (kWh)	Forecasted Sales	Forecasted Sales
RS, VFD & LEV	114,970,335	69,994,086	6,329,913,788	6,353,305,471
GS	28,044,606	28,025,864	1,965,268,093	1,835,419,500
AES	564,406	0	139,739,551	0
PS, TODP & TODS (LP)	20,950,226	18,363,870	3,681,693,860	3,910,428,064
Total	164,529,573	116,383,820	12,116,615,292	12,099,153,035

- (1) Explain the difference of 48,145,753 kWh (164,529,573 kWh - 116,383,820 kWh) in total energy savings for tariff RS, VFD & LEV from Case No. 2007-00319 to the total energy savings in the current application.
- (2) Is the increase in forecasted sales for tariff RS, VFD & LEV from Case No. 2007-00319 to the current application reflective of the projected energy savings of the residential DSM programs or were there other factors to be considered? Explain.
- f. For each tariff in Exhibit LEB-1, demonstrate, in electronic format with all formulas intact, how each Balance Adjustment Component (DBA) was determined for all the LG&E electric & gas and KU electric tariffs.

- g. Provide, in electronic format with all formulas intact, the calculations to support the DSM Incentive Component in Exhibit LEB-1 for the tariffs listed in the following table.

Tariff	LG&E Electric	LG&E Gas	KU Electric
RS, RRP, VFD & LEV	\$311,862		
GS & GRP	\$61,721		
PS	\$29,271		
CTOD & CTODS	\$9,089		
RGS & VFD		\$113,712	
CGS, AAGS, TS & FT		\$0	
RS, VFD & LEV			\$409,332
GS			\$70,260
AES			\$1,650
PS, TODP & TODS			\$38,606
Total	\$411,943	\$113,712	\$519,848

A-4. The DRLS component of the DSM Cost Recovery mechanism is computed by multiplying the lost sales (in kWh) for thirty-six (36) months or until implementation of new rates pursuant to a general rate case, whichever comes first by the non-variable revenue requirement for each of the customer classes. As such, when comparing the proposed DRLS from 2007-00319 to the filed DRLS in 2011-00134, the primary difference is due to the smaller scope of the previous DSM programming prior to the 2007-00319 filing. The DRLS in the 2007-00319 case contained lost sales associated with the four previously approved programs and only the initial year's lost sales of the proposed programming. As this new programming produced a significantly higher level of lost sales, this component has grown over time.

- a. (1) Yes, the total amount would be \$23,011,116.
- (2) The three new proposed programs are included in the "DCR Summary – DSM Budget Allocation" schedule. But, due to a printer format issue, were inadvertently omitted on the printed page. Their respective budgets are included in the \$23,011,116 total.
- (3) An electronic version of this report is provided on the enclosed CD in the folder titled Question No. 4.a. (3). Note, this is the same schedule for Louisville Gas and Electric – Gas Service and Kentucky Utilities - Electric Service

***Note: the figures throughout PSC question #4 that are referred as from Case No. 2007-00319 are actually drawn from the filed DSM tariffs effective on January 1, 2009.***



- b. (1) The lost sales factor for Louisville Gas and Electric – Electric Service is determined in several steps for each rate schedule. The first step is to determine the total energy savings that are expected to be achieved from the programs. Here, the lost sales period is from November 2009 through December 2011. This is a period of 26 months. The next step for each rate schedule is to multiply the total energy savings by the non-variable revenue rate to produce the Lost Net Revenue. Finally, the Lost Net Revenue is divided by the estimated billing determinants (2011 forecasted sales) by rate schedule to then compute the Lost Sales Component (DRLS) factor.
- (2) According to the Companies' documents, the Lost Net Revenues Total Amount from the DRLS for RS et al in Case No. 2007-00319 was \$1.9 million, not \$3.6 million. In response to the question on the increase from \$1.9 million (as opposed to \$3.6 million) to \$6.4 million, this can be explained as primarily an increase of energy savings in the lost sales period. Here, the increase is due to the energy savings accumulating as the programs mature over the years, as well as the three new residential programs and their respective savings in 2011. The non-variable revenue rate for RS et al also increased from \$0.052 to \$0.0588.
- (3) According to the Companies' documents, the Lost Net Revenues Total Amount from the DRLS for all of LG&E in Case No. 2007-00319 was \$3,532,862 with total program costs of \$11,461,150. The percentage of lost sales from Case No. 2007-00319 is then 30.8%. The percentage is higher due to similar reasons as explained in 4.b.(2).
- (4) An electronic version of this report is provide on the enclosed CD in the folder titled Question No. 4.b.(4).
- c. (1) The difference provided in the question is for all tariff schedules, not just the RS, RRP, VFD, and LEV specified. Regardless, the reason is similar. The total energy savings difference for tariff schedules RS, RRP, VFD, and LEV is primarily due to the accumulation of energy savings from the respective residential programs. Those from the current case, as opposed to Case No. 2007-00319, have additional years of accumulated savings as result of the more mature programs.
- (2) The change in forecasted sales for tariff schedules RS, RRP, VFD, and LEV is reflective of the projected energy savings associated from the proposed filing, but there are many other factors at play due to the size and complexity of the forecasted sales relative to energy savings. Forecasted sales are impacted by load growth assumptions, which are derived from various economic indicators.
- d. (1) The lost sales factor for Kentucky Utilities – Electric Service is determined in several steps for each rate schedule. The first step is to determine the total energy savings that are expected to be achieved from the programs. Here, the lost sales period is from November 2009 through December 2011. This is a period of 26

months. The next step for each rate schedule is to multiply the total energy savings by the non-variable revenue rate to produce the Lost Net Revenue. Finally, the Lost Net Revenue is divided by the estimated billing determinants (2011 forecasted sales) by rate schedule to then compute the Lost Sales Component (DRLS) factor.

- (2) The DRLS in Case No. 2007-00319 for tariff schedules RS, RRP, VFD, and LEV is \$2.4 million, not \$2.7 million, according to the Companies documents. In response to the question on the increase from \$2.4 million (as opposed to \$2.7 million) to \$5.5 million, this can be explained as primarily an increase of energy savings in the lost sales period. Here, the increase is due to the energy savings accumulating as the programs mature over the years, as well as the three new residential programs and their respective savings in 2011. The non-variable revenue rate for RS et al also increased from \$0.036 to \$0.0482.
  - (3) According to the Companies' documents, the Lost Net Revenues Total Amount from the DRLS for all of KU in Case No. 2007-00319 was \$2,443,404 with total program costs of \$12,292,104. The percentage of lost sales from Case No. 2007-00319 is then 19.9%. The percentage is higher due to similar reasons as explained in 4.d.(2).
  - (4) An electronic version of this report is provided on the enclosed CD in the folder titled Question No. 4.d.(4).
- e. (1) The difference provided in the question is for all tariff schedules, not just the RS, RRP, VFD, and LEV specified. Regardless, the reason is similar. The total energy savings difference for tariff schedules RS, RRP, VFD, and LEV is primarily due to the accumulation of energy savings from the respective residential programs. Those from the current case, as opposed to Case No. 2007-00319, have additional years of accumulated savings in addition to more mature programs.
- (2) The change in forecasted sales for tariff schedules RS, RRP, VFD, and LEV is reflective of the projected energy savings associated from the proposed filing, but there are many other factors at play due to the size and complexity of the forecasted sales relative to energy savings. Forecasted sales are impacted by load growth assumptions, which are derived from various economic indicators.
- f. The DBA Component looks back at the prior year to determine if either DSM revenues need to be returned to the respective ratepayers or if additional revenues need to be collected. This is because the DBA is based on actual DSM expenditures from the prior year as compared to budgeted expenditures. Also, the DBA is derived from actual DSM revenues collected as compared to what was budgeted to be collected. Thus, for the proposed tariff, the most recently approved at the time DBA component was used as an estimate for what the DBA component would be. If actual expenditures were equal to budgeted expenditures, and revenues collected were equal

to what was forecasted to be collected, then the DBA component would be \$0, which would result in a DBA factor of \$0.0/kWh.

- g. An electronic version of this report is provided on the enclosed CD in the folder titled Question No. 4.g.



**LOUISVILLE GAS AND ELECTRIC COMPANY  
KENTUCKY UTILITIES COMPANY**

**Response to the Commission Staff's First Information Request  
Dated June 1, 2011**

**Case No. 2011-00134**

**Question No. 5**

**Witness: Lonnie E. Bellar**

Q-5. Refer to the Application, Exhibit LEB-3.

a. In Exhibit LEB-3, the annual book depreciation rate is 12.00 percent for LG&E and 7.13 percent for KU. The tax depreciation rate is 3.75 percent. The Deferred Tax Balance is (\$29,095). On page 1 of 9, in Year 1, the rate base is \$898,225, and is determined by the following formula:  $\$987,648 - (\$118,518) - \$29,095 = \$898,225$ .

(1) Confirm that the formula is mathematically correct.

(2) Since the book depreciation rate is more accelerated than the tax depreciation, is the deferred tax balance amount the opposite sign than would be normally thought, if the tax depreciation rate were greater than the book depreciation rate? Explain.

b. There is no annual property tax expense in the Total OE, even though an annual property tax rate is supplied. Explain.

c. If an annual property tax expense were included in the Total OE, would the annual property tax expense be excluded from the next base rate case since it is being recovered in the DSM tariff? Explain.

A-5. a. (1) The Companies have verified and confirmed that the rate base calculation is correct.

(2) Based on further review, the Companies have discovered that the incorrect tax depreciation rates were utilized in calculating the rate base. The devices would be booked under FERC Account 397 – Communications Equipment and are more appropriately depreciated at the MACRS seven years rate. At this time, the Companies are providing a revised Exhibit LEB-3 (see attached). This change in depreciation only impacted the energy charge for LG&E residential gas. The change reduced the DCCR component from \$0.00552 per Ccf to \$0.00551 per Ccf, thus changing the total DSMRC from a rate of \$0.02398 Ccf to a rate of

\$0.02397. After the Commission has issued the final order in this proceeding, LG&E will file its revised tariffs setting out the rates authorized.

- b. Refer to Revised Exhibit LEB-3
- c. Yes. Because the DSM is a separate rate mechanism and is recovered separately from customers, all DSM revenues and expenses will be removed from the test year.

# Capitalization Summary 2011 Plan - LG&E Electric - Updated

Project 1 Residential DLC	2011	2012	2013	2014	2015	2016	2017
Revenue Requirement							
Annual Cash Flow	987,648	1,387,315	1,257,040	1,281,724	1,142,973	1,165,375	1,188,226
Eligible (Not Depreciated)	-	-	-	-	-	-	-
Eligible Cumulative	987,648	2,374,963	3,632,003	4,913,727	6,056,700	7,222,075	8,410,301
Book Depreciation rate, per year	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%
Tax Depreciation rate, per year	14.29%	24.49%	17.49%	12.49%	8.93%	8.92%	8.93%
Book Depreciation	118,518	284,996	435,840	589,647	726,804	866,649	1,009,236
Book Accumulated Depreciation Balance	118,518	403,513	839,354	1,429,001	2,155,805	3,022,454	4,031,690
Income Tax Rate	35.71%	35.71%	35.71%	35.71%	35.71%	35.71%	35.71%
Annual Property Tax Rate	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%
Tax Depreciation	141,135	581,628	635,237	613,725	540,863	644,209	751,040
Deferred Tax Balance	8,076	105,920	71,200	8,597	(66,395)	(79,428)	(92,196)
<b>Revenue Recovery on Capital Expenditure to date</b>							
Eligible Plant, cumulative capital expenditures	987,648	2,374,963	3,632,003	4,913,727	6,056,700	7,222,075	8,410,301
Less: Retired Plant/Capital	-	-	-	-	-	-	-
Less: Accumulated Depreciation	(118,518)	(403,513)	(839,354)	(1,429,001)	(2,155,805)	(3,022,454)	(4,031,690)
Plus: Accumulated Depreciation on Retired Plant/Capital	-	-	-	-	-	-	-
Less: Deferred Tax Balance	(8,076)	(113,997)	(185,196)	(193,794)	(127,399)	(47,971)	44,225
Plus: Deferred Tax Balance on Retired Plant/Capital	-	-	-	-	-	-	-
Rate Base	\$ 861,054	\$ 1,857,453	\$ 2,607,453	\$ 3,290,933	\$ 3,773,496	\$ 4,151,650	\$ 4,422,836
Weighted Average Cost of Capital	10.70%	10.70%	10.70%	10.70%	10.70%	10.70%	10.70%
Return	\$ 92,169	\$ 198,826	\$ 279,108	\$ 352,269	\$ 403,924	\$ 444,402	\$ 473,431
Operating expenses (O&M)	1,813,750	2,498,794	2,573,018	3,195,642	3,263,083	3,382,904	3,523,581
Annual Depreciation expense	118,518	284,996	435,840	589,647	726,804	866,649	1,009,236
Less depreciation on Retired Plant/Capital	-	-	-	-	-	-	-
Annual Property Tax expense	-	-	-	-	-	-	-
<b>Total OE</b>	\$ 1,932,268	\$ 2,783,790	\$ 3,008,858	\$ 3,785,299	\$ 3,989,887	\$ 4,249,553	\$ 4,532,818
<b>Total E(m)</b>	2,024,437	2,982,616	3,287,966	4,137,558	4,393,811	4,693,956	5,006,248

**Capitalization Summary  
2011 Plan - LG&E Electric - Updated**

Project 2	2011	2012	2013	2014	2015	2016	2017
<b>Commercial DLC</b>							
Revenue Requirement	51,659	60,515	61,725	62,960	49,430	50,419	51,427
Annual Cash Flow	-	-	-	-	-	-	-
Eligible (Not Depreciated)	51,659	112,174	173,899	236,859	286,289	336,708	388,136
Eligible Cumulative	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%
Book Depreciation rate, per year	14.29%	24.49%	17.49%	12.49%	8.93%	8.92%	8.93%
Tax Depreciation rate, per year	6,199	13,461	20,868	28,423	34,355	40,405	46,576
Book Depreciation	6,199	19,660	40,528	68,951	103,306	143,711	190,287
Book Accumulated Depreciation Balance	35.71%	35.71%	35.71%	35.71%	35.71%	35.71%	35.71%
Income Tax Rate	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%
Annual Property Tax Rate	7,382	27,471	30,415	29,584	25,566	30,034	34,661
Tax Depreciation	422	5,003	3,409	414	(3,138)	(3,703)	(4,255)
Deferred Tax Balance							
<b>Revenue Recovery on Capital Expenditure to date</b>							
Eligible Plant, cumulative capital expenditures	51,659	112,174	173,899	236,859	286,289	336,708	388,136
Less: Retired Plant/Capital	-	-	-	-	-	-	-
Less: Accumulated Depreciation	(6,199)	(19,660)	(40,528)	(68,951)	(103,306)	(143,711)	(190,287)
Plus: Accumulated Depreciation on Retired Plant/Capital	-	-	-	-	-	-	-
Less: Deferred Tax Balance	(422)	(5,425)	(8,834)	(9,249)	(6,110)	(2,407)	1,848
Plus: Deferred Tax Balance on Retired Plant/Capital	-	-	-	-	-	-	-
Rate Base	\$ 45,037	\$ 87,089	\$ 124,537	\$ 158,659	\$ 176,873	\$ 190,590	\$ 199,696
Weighted Average Cost of Capital	10.70%	10.70%	10.70%	10.70%	10.70%	10.70%	10.70%
Return	\$ 4,821	\$ 9,322	\$ 13,331	\$ 16,983	\$ 18,933	\$ 20,401	\$ 21,376
Operating expenses (O&M)	94,400	117,167	123,291	146,947	147,102	152,409	158,456
Annual Depreciation expense	6,199	13,461	20,868	28,423	34,355	40,405	46,576
Less depreciation on Retired Plant/Capital	-	-	-	-	-	-	-
Annual Property Tax expense	-	-	-	-	-	-	-
<b>Total OE</b>	\$ 100,599	\$ 130,628	\$ 144,159	\$ 175,370	\$ 181,457	\$ 192,814	\$ 205,032
<b>Total E(m)</b>	105,420	139,950	157,489	192,353	200,390	213,215	226,408



**Capitalization Summary  
2011 Plan - LG&E Electric - Updated**

	2011	2012	2013	2014	2015	2016	2017
<b>Total E(m) - All LGE Electric Projects</b>	2,129,856	3,122,566	3,445,455	4,329,911	4,594,200	4,907,171	5,232,657
<b>Total Revenue Requirements</b>							
Residential DLC	2,024,437	2,982,616	3,287,966	4,137,558	4,393,811	4,693,956	5,006,248
Commercial DLC	105,420	139,950	157,489	192,353	200,390	213,215	226,408
<b>Total</b>	2,129,856	3,122,566	3,445,455	4,329,911	4,594,200	4,907,171	5,232,657
<b>Project 1</b>							
Annual Cash Flow	987,648	1,387,315	1,257,040	1,281,724	1,142,973	1,165,375	1,188,226
<b>Project 2</b>							
Annual Cash Flow	51,659	60,515	61,725	62,960	49,430	50,419	51,427
<b>Total-LGE Electric</b>	1,039,307	1,447,830	1,318,765	1,344,684	1,192,403	1,215,794	1,239,653

# Capitalization Summary 2011 Plan - LG&E Gas - Updated

Project 1	2011	2012	2013	2014	2015	2016	2017
<b>Residential DLC</b>							
Revenue Requirement	536,747	753,950	683,151	696,566	621,160	633,335	645,753
Annual Cash Flow	-	-	-	-	-	-	-
Eligible (Not Depreciated)	536,747	1,290,697	1,973,848	2,670,413	3,291,573	3,924,908	4,570,661
Eligible Cumulative	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%
Book Depreciation rate, per year	14.29%	24.49%	17.49%	12.49%	8.93%	8.92%	8.93%
Tax Depreciation rate, per year	64,410	154,884	236,862	320,450	394,989	470,989	548,479
Book Depreciation	64,410	219,293	456,155	776,605	1,171,593	1,642,582	2,191,062
Book Accumulated Depreciation Balance	35.71%	35.71%	35.71%	35.71%	35.71%	35.71%	35.71%
Income Tax Rate	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%
Annual Property Tax Rate	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%
Tax Depreciation	76,701	316,092	345,226	333,535	293,937	350,102	408,160
Deferred Tax Balance	4,389	57,564	38,694	4,672	(36,083)	(43,166)	(50,105)
<b>Revenue Recovery on Capital Expenditure to date</b>							
Eligible Plant, cumulative capital expenditures	536,747	1,290,697	1,973,848	2,670,413	3,291,573	3,924,908	4,570,661
Less: Retired Plant/Capital	(64,410)	(219,293)	(456,155)	(776,605)	(1,171,593)	(1,642,582)	(2,191,062)
Less: Accumulated Depreciation	-	-	-	-	-	-	-
Plus: Accumulated Depreciation on Retired Plant/Capital	(4,389)	(61,953)	(100,647)	(105,319)	(69,236)	(26,070)	24,034
Less: Deferred Tax Balance	-	-	-	-	-	-	-
Plus: Deferred Tax Balance on Retired Plant/Capital	\$ 467,948	\$ 1,009,451	\$ 1,417,046	\$ 1,788,490	\$ 2,050,744	\$ 2,256,255	\$ 2,403,634
Rate Base	10.70%	10.70%	10.70%	10.70%	10.70%	10.70%	10.70%
Weighted Average Cost of Capital	\$ 50,090	\$ 108,054	\$ 151,684	\$ 191,444	\$ 219,516	\$ 241,515	\$ 257,291
Return							
Operating expenses (O&M)	965,700	1,357,994	1,398,332	1,736,703	1,773,354	1,838,473	1,914,925
Annual Depreciation expense	64,410	154,884	236,862	320,450	394,989	470,989	548,479
Less depreciation on Retired Plant/Capital	-	-	-	-	-	-	-
Annual Property Tax expense	-	-	-	-	-	-	-
Total OE	\$ 1,050,110	\$ 1,512,878	\$ 1,635,194	\$ 2,057,153	\$ 2,168,343	\$ 2,309,462	\$ 2,463,404
<b>Total E(m)</b>	1,100,200	1,620,932	1,786,877	2,248,597	2,387,860	2,550,976	2,720,695

**Capitalization Summary  
2011 Plan - LG&E Gas - Updated**

	2011	2012	2013	2014	2015	2016	2017
<b>Commercial DLC</b>							
Revenue Requirement	27,991	32,790	33,445	34,114	26,784	27,319	27,866
Annual Cash Flow	-	-	-	-	-	-	-
Eligible (Not Depreciated)	27,991	60,781	94,226	128,340	155,124	182,443	210,309
Eligible Cumulative	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%
Book Depreciation rate, per year	14.29%	24.49%	17.49%	12.49%	8.93%	8.92%	8.93%
Tax Depreciation rate, per year	3.359	7.294	11,307	15,401	18,615	21,893	25,237
Book Depreciation	3,359	10,653	21,960	37,361	55,975	77,869	103,106
Book Accumulated Depreciation Balance	35.71%	35.71%	35.71%	35.71%	35.71%	35.71%	35.71%
Income Tax Rate	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%
Annual Property Tax Rate	4,000	14,885	16,480	16,030	13,853	16,274	18,781
Tax Depreciation	229	2,711	1,847	225	(1,701)	(2,007)	(2,305)
Deferred Tax Balance							
Revenue Recovery on Capital Expenditure to date	27,991	60,781	94,226	128,340	155,124	182,443	210,309
Eligible Plant, cumulative capital expenditures	-	-	-	-	-	-	-
Less: Retired Plant/Capital	(3,359)	(10,653)	(21,960)	(37,361)	(55,975)	(77,869)	(103,106)
Plus: Accumulated Depreciation	-	-	-	-	-	-	-
Plus: Accumulated Depreciation on Retired Plant/Capital	(229)	(2,940)	(4,787)	(5,011)	(3,311)	(1,304)	1,001
Less: Deferred Tax Balance	-	-	-	-	-	-	-
Plus: Deferred Tax Balance on Retired Plant/Capital	\$ 24,403	\$ 47,188	\$ 67,480	\$ 85,988	\$ 95,838	\$ 103,270	\$ 108,204
Rate Base	10.70%	10.70%	10.70%	10.70%	10.70%	10.70%	10.70%
Weighted Average Cost of Capital	\$ 2,612	\$ 5,051	\$ 7,223	\$ 9,202	\$ 10,259	\$ 11,054	\$ 11,582
Return							
Operating expenses (O&M)	51,150	63,486	66,804	79,622	79,706	82,582	85,858
Annual Depreciation expense	3,359	7,294	11,307	15,401	18,615	21,893	25,237
Less depreciation on Retired Plant/Capital	-	-	-	-	-	-	-
Annual Property Tax expense	-	-	-	-	-	-	-
Total OE	\$ 54,509	\$ 70,780	\$ 78,112	\$ 95,023	\$ 98,321	\$ 104,475	\$ 111,096
Total E(m)	57,121	75,831	85,335	104,225	108,580	115,529	122,678

**Capitalization Summary  
2011 Plan - LG&E Gas - Updated**

	2011	2012	2013	2014	2015	2016	2017
<b>Total E(m) - All LGE Gas Projects</b>	1,157,321	1,696,763	1,872,212	2,352,822	2,496,440	2,666,506	2,843,373
<b>Total Revenue Requirements</b>							
Residential DLC	1,100,200	1,620,932	1,786,877	2,248,597	2,387,860	2,550,976	2,720,695
Commercial DLC	57,121	75,831	85,335	104,225	108,580	115,529	122,678
<b>Total</b>	1,157,321	1,696,763	1,872,212	2,352,822	2,496,440	2,666,506	2,843,373
<b>Project 1</b>							
Annual Cash Flow	536,747	753,950	683,151	696,566	621,160	633,335	645,753
<b>Project 2</b>							
Annual Cash Flow	27,991	32,790	33,445	34,114	26,784	27,319	27,866
<b>Total-LGE Gas</b>	564,738	786,739	716,596	730,680	647,943	660,654	673,619

**Capitalization Summary  
2011 Plan - KU Electric - Updated**

Project 1	2011	2012	2013	2014	2015	2016	2017
<b>Residential DLC</b>							
Revenue Requirement							
Annual Cash Flow	1,524,395	2,141,264	1,940,191	1,978,290	1,764,132	1,798,710	1,833,979
Eligible (Not Depreciated)	-	-	-	-	-	-	-
Eligible Cumulative	1,524,395	3,665,659	5,605,851	7,584,141	9,348,273	11,146,983	12,980,962
Book Depreciation rate, per year	7.13%	7.13%	7.13%	7.13%	7.13%	7.13%	7.13%
Tax Depreciation rate, per year	14.29%	24.49%	17.49%	12.49%	8.93%	8.92%	8.93%
Book Depreciation	108,689	261,362	399,697	540,749	666,532	794,780	925,543
Book Accumulated Depreciation Balance	108,689	370,051	769,748	1,310,497	1,977,029	2,771,809	3,697,352
Income Tax Rate	35.71%	35.71%	35.71%	35.71%	35.71%	35.71%	35.71%
Annual Property Tax Rate	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%
Tax Depreciation	217,836	897,720	980,463	947,259	834,801	994,311	1,159,200
Deferred Tax Balance	38,974	227,228	207,378	145,155	60,085	71,248	83,433
<b>Revenue Recovery on Capital Expenditure to date</b>							
Eligible Plant, cumulative capital expenditures	1,524,395	3,665,659	5,605,851	7,584,141	9,348,273	11,146,983	12,980,962
Less: Retired Plant/Capital	-	-	-	-	-	-	-
Less: Accumulated Depreciation	(108,689)	(370,051)	(769,748)	(1,310,497)	(1,977,029)	(2,771,809)	(3,697,352)
Plus: Accumulated Depreciation on Retired Plant/Capital	-	-	-	-	-	-	-
Less: Deferred Tax Balance	(38,974)	(266,202)	(473,580)	(618,735)	(678,819)	(750,067)	(833,501)
Plus: Deferred Tax Balance on Retired Plant/Capital	-	-	-	-	-	-	-
Rate Base	\$ 1,376,732	\$ 3,029,407	\$ 4,362,523	\$ 5,654,909	\$ 6,692,424	\$ 7,625,107	\$ 8,450,110
Weighted Average Cost of Capital	10.32%	10.32%	10.32%	10.32%	10.32%	10.32%	10.32%
Return	\$ 142,037	\$ 312,544	\$ 450,081	\$ 583,416	\$ 690,457	\$ 786,681	\$ 871,797
Operating expenses (O&M)	2,799,450	3,856,789	3,971,350	4,932,345	5,036,437	5,221,377	5,438,506
Annual Depreciation expense	108,689	261,362	399,697	540,749	666,532	794,780	925,543
Less depreciation on Retired Plant/Capital	-	-	-	-	-	-	-
Annual Property Tax expense	-	-	-	-	-	-	-
<b>Total OE</b>	\$ 2,908,139	\$ 4,118,150	\$ 4,371,047	\$ 5,473,084	\$ 5,702,969	\$ 6,016,157	\$ 6,364,049
<b>Total E(m)</b>	3,050,177	4,430,694	4,821,128	6,056,510	6,393,426	6,802,838	7,235,846

**Capitalization Summary  
2011 Plan - KU Electric - Updated**

Project 2	2011	2012	2013	2014	2015	2016	2017
<b>Commercial DLC</b>							
Revenue Requirement	79,650	93,305	95,171	97,074	76,214	77,738	79,293
Annual Cash Flow	-	-	-	-	-	-	-
Eligible (Not Depreciated)	79,650	172,955	268,125	365,199	441,413	519,151	598,445
Eligible Cumulative	7.13%	7.13%	7.13%	7.13%	7.13%	7.13%	7.13%
Book Depreciation rate, per year	14.29%	24.49%	17.49%	12.49%	8.93%	8.92%	8.93%
Tax Depreciation rate, per year	5.679	12.332	19,117	26,039	31,473	37,015	42,669
Book Depreciation	5,679	18,011	37,128	63,167	94,639	131,655	174,324
Book Accumulated Depreciation Balance	35.71%	35.71%	35.71%	35.71%	35.71%	35.71%	35.71%
Income Tax Rate	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%
Annual Property Tax Rate	11.382	42.357	46,895	45,613	39,418	46,308	53,441
Tax Depreciation	2,036	10,721	9,919	6,990	2,837	3,318	3,846
Deferred Tax Balance							
<b>Revenue Recovery on Capital Expenditure to date</b>							
Eligible Plant, cumulative capital expenditures	79,650	172,955	268,125	365,199	441,413	519,151	598,445
Less: Retired Plant/Capital	-	-	-	-	-	-	-
Less: Accumulated Depreciation	(5,679)	(18,011)	(37,128)	(63,167)	(94,639)	(131,655)	(174,324)
Plus: Accumulated Depreciation on Retired Plant/Capital	-	-	-	-	-	-	-
Less: Deferred Tax Balance	(2,036)	(12,758)	(22,676)	(29,666)	(32,503)	(35,821)	(39,668)
Plus: Deferred Tax Balance on Retired Plant/Capital	-	-	-	-	-	-	-
Rate Base	\$ 71,935	\$ 142,186	\$ 208,321	\$ 272,366	\$ 314,271	\$ 351,675	\$ 384,453
Weighted Average Cost of Capital	10.32%	10.32%	10.32%	10.32%	10.32%	10.32%	10.32%
Return	\$ 7,421	\$ 14,669	\$ 21,492	\$ 28,100	\$ 32,423	\$ 36,282	\$ 39,664
Operating expenses (O&M)	145,549	180,653	190,095	226,569	226,808	234,990	244,314
Annual Depreciation expense	5,679	12,332	19,117	26,039	31,473	37,015	42,669
Less depreciation on Retired Plant/Capital	-	-	-	-	-	-	-
Annual Property Tax expense	-	-	-	-	-	-	-
Total OE	\$ 151,228	\$ 192,965	\$ 209,212	\$ 252,608	\$ 258,281	\$ 272,006	\$ 286,984
Total E(m)	158,650	207,654	230,705	280,708	290,704	308,288	326,648

**Capitalization Summary  
2011 Plan - KU Electric - Updated**

	2011	2012	2013	2014	2015	2016	2017
<b>Total E(m) - All KU Electric Projects</b>							
	3,208,827	4,638,348	5,051,833	6,337,218	6,684,130	7,111,126	7,562,493
<b>Total Revenue Requirements</b>							
Residential DLC	3,050,177	4,430,694	4,821,128	6,056,510	6,393,426	6,802,838	7,235,846
Commercial DLC	158,650	207,654	230,705	280,708	290,704	308,288	326,648
<b>Total</b>	3,208,827	4,638,348	5,051,833	6,337,218	6,684,130	7,111,126	7,562,493
<b>Project 1</b>							
Annual Cash Flow	1,524,395	2,141,264	1,940,191	1,978,290	1,764,132	1,798,710	1,833,979
<b>Project 2</b>							
Annual Cash Flow	79,650	93,305	95,171	97,074	76,214	77,738	79,293
<b>Total-KU Electric</b>	1,604,045	2,234,569	2,035,362	2,075,364	1,840,346	1,876,448	1,913,272





**LOUISVILLE GAS AND ELECTRIC COMPANY  
KENTUCKY UTILITIES COMPANY**

**Response to the Commission Staff's First Information Request  
Dated June 1, 2011**

**Case No. 2011-00134**

**Question No. 6**

**Witness: Michael E. Hornung**

- Q-6. In the Application and in Mr. Michael E. Hornung's testimony ("Hornung Testimony"), the existing programs will be in effect through 2014 based on the Order in Case No. 2007-00319 dated March 31, 2008. Five of the existing programs are without change. The five are the following: Residential High Efficiency Lighting, Residential New Construction, Residential and Commercial HVAC Diagnostic and Tune Up, Customer Education and Public Information, and the Dealer Referral Network. The Companies propose to make changes to the following existing programs: Residential and Commercial Load Management/Demand Conservation Program, Commercial Conservation/Commercial Incentive Program, Residential Conservation/Home Energy Performance Program, Residential Low income Weatherization Program (Wecare), and the Program Development and Administration. The following are proposed new programs: Smart Energy Profile Program, Residential Incentive Program, and the Residential Refrigerator Removal Program.
- a. Provide the proposed termination date for the existing programs the Companies are proposing to change. Explain.
  - b. Provide the proposed termination date for the proposed new programs. Explain.
- A-6.
- a. The proposed termination date for the existing programs the Companies are proposing to change is 2017. The Companies are seeking approval for program budgets and metrics, to be prorated to begin six weeks following the date of the Commission's Order approving the Application. There is a possibility that any remaining balance from the calendar-year-one budget may be applied to an eighth calendar year of program activities, allowing the approved budgets to cover a full seven years of programming.
  - b. The proposed termination date for the proposed new programs is 2017. The Companies are seeking approval for program budgets and metrics, to be prorated to begin six weeks following the date of the Commission's Order approving the Application. There is a possibility that any remaining balance from the calendar-year-one budget may be applied to an eighth calendar year of program activities, allowing the approved budgets to cover a full seven years of programming.



**LOUISVILLE GAS AND ELECTRIC COMPANY  
KENTUCKY UTILITIES COMPANY**

**Response to the Commission Staff's First Information Request  
Dated June 1, 2011**

**Case No. 2011-00134**

**Question No. 7**

**Witness: Michael E. Hornung**

- Q-7. Refer to page 14, line 1, of the Hornung Testimony. There is a table of program costs. Provide this table in an electronic format.
- A-7. An electronic version of this table is provided on the enclosed CD in the folder titled Question No. 7.



**LOUISVILLE GAS AND ELECTRIC COMPANY  
KENTUCKY UTILITIES COMPANY**

**Response to the Commission Staff's First Information Request  
Dated June 1, 2011**

**Case No. 2011-00134**

**Question No. 8**

**Witness: Michael E. Hornung**

- Q-8. Refer to pages 15 and 16 of the Hornung Testimony. There is a statement, "If the Companies' reviews reveal any programs to be cost-ineffective or otherwise underperforming, the Companies will discontinue the program and notify the Commission by a letter or motion."
- a. What determination will the Companies use as identifying cost-ineffective or underperforming programs? Explain.
  - b. Have the Companies ever discontinued any cost-ineffective or underperforming program(s)? Explain.
  - c. If the Companies determine that a program or programs are cost-ineffective or underperforming, would the Companies consider filing an application to remove the proposed costs of the program(s), if those costs significantly affect the residential or commercial DSM tariffs? Explain.
- A-8.
- a. For a program to be discontinued, the Companies take a three-pronged approach: (1) is the program operating effectively within the budget that was developed and approved; (2) has the program met or exceeded the necessary energy and demand savings; and (3) as all DSM programs' participation is voluntary, is the program meeting the customer expectations and perceived value?
  - b. In 2001, the Companies discontinued the Industrial Lighting Program. This was a Program approved in KPSC Case No. 2000-459. Upon receipt of the Commission Order approving this program and prior to initiating this program, the Companies surveyed the industrial customer class to determine a projected participation in light of the "Industrial-Opt Out" provision within KRS 278.285 (3). The survey results demonstrated that over 85% of this customer class would choose to not participate, which would not make running the program cost-effective. At that time, the Companies chose not to implement the program.

- c. The Companies are interested in pursuing only programs that allow for the delay in construction of generating assets and ensure the prudent use of funds. To that end, they review the programs' performance on an ongoing basis and make adjustments as needed, then adjust the DSM billing factors annually. Generally speaking, the Companies do not believe it will be necessary to terminate a program mid-year; a program's temporarily poor performance may be improved, and in the event it cannot in a reasonable amount of time, the Companies will terminate it during the annual DSM billing adjustment process. That notwithstanding, if (1) a program is performing sufficiently poorly that it would be prudent to terminate it before the annual DSM billing adjustment process and (2) terminating the program would significantly affect the Companies' residential or commercial DSM tariffs, the Companies would be willing to file with the Commission to terminate the program.



**LOUISVILLE GAS AND ELECTRIC COMPANY  
KENTUCKY UTILITIES COMPANY**

**Response to the Commission Staff's First Information Request  
Dated June 1, 2011**

**Case No. 2011-00134**

**Question No. 9**

**Witness: Michael E. Hornung**

- Q-9. Refer to page 21 of the Hornung Testimony, which mentions that the Companies are considering partnering with the Kentucky Home Performance Program ("KHPP"). A Kentucky Home Performance Powerpoint presentation, dated July 23, 2010, states that Kentucky Home Performance will serve middle to upper income bracket households.
- a. Will the Companies have an income level requirement to participate in any such program? Explain.
  - b. If a partnership is formed, explain whether the proposed amount of the incentive paid by the Companies would be affected by the incentives received through the KHPP.
- A-9. a. The Companies will not have an income requirement to participate in the Companies' Home Energy Performance Program. The Home Energy Performance Program has been designed for all residential customers. The tier structure allows for energy savings at all levels. For a customer charge of \$25 the first tier audit provides the customer approximately 10% energy saving generated from the energy efficiency measures and air sealing deployed at the time of the audit. The program budget is designed for 75% of the program participants stopping at the tier one level. At the same time the online audit tool is accessible to all customers on the Company's website [www.lge-ku.com](http://www.lge-ku.com).
- b. The proposed amount of the incentive paid by the Companies will not change. However, the Companies will look to coordinate with the Kentucky Home Performance Program to ensure that the Companies' customers have the opportunity to participate in both programs to maximize their incentive for energy efficiency efforts in their home.





**LOUISVILLE GAS AND ELECTRIC COMPANY  
KENTUCKY UTILITIES COMPANY**

**Response to the Commission Staff's First Information Request  
Dated June 1, 2011**

**Case No. 2011-00134**

**Question No. 10**

**Witness: Michael E. Hornung**

- Q-10. Refer to page 29 of the Hornung Testimony. Over 20 utilities across the nation have implemented secondary refrigerator removal programs similar to the proposed program. A similar program evaluated by another utility was determined unjustifiable on a cost/benefit basis. Other than the amount of the payment offered by the utility to the customer participant for a refrigerator, explain what other factors might determine whether the program will be cost beneficial for one utility, but not another.
- A-10. There are many factors that will determine the cost benefit of a particular program. The total program budget is a key factor, especially given the varying costs that may be incurred by having a third-party vendor schedule and remove the items. This vendor could have higher operating costs in one state versus another. Other factors pertain to the size of the program. For those areas of high urban density, the number of expected units removed versus a very rural area could differ significantly. Lastly, each utility has unique costs, such as avoided capacity costs and basic energy costs that would factor in to the benefits achieved of the program. The analysis completed by the Companies associated with this program demonstrates it to be cost effective under the California Standard Practice Manual benefit-cost tests.



**LOUISVILLE GAS AND ELECTRIC COMPANY  
KENTUCKY UTILITIES COMPANY**

**Response to the Commission Staff's First Information Request  
Dated June 1, 2011**

**Case No. 2011-00134**

**Question No. 11**

**Witness: Michael E. Hornung / Counsel**

- Q-11. Refer to Exhibit MEH-1, Volume I, at page 19. A comment is made that, "In December 2009, the Companies became aware of a technology-related risk concerning the programmable thermostats used with the Demand Conservation Program."
- a. Explain the technology-related risk.
  - b. Was there any financial harm caused by this risk and, if so, was there any financial settlement or credit applied to the DSM program costs? Explain.
  - c. Did the Companies change vendor(s) and did the vendor(s) fulfill their contractual obligations regarding the programmable thermostats? Explain.
  - d. The Companies state that, although successful, the Companies recognize that the potential for growth for the Residential and Commercial Load Management Demand Conservation program is still significant.
    - (1) Explain whether there has been any resistance to the program coming from the perception that cycling the equipment can be harmful to the equipment or shorten the life span of the equipment. Include in the explanation whether any evidence exists that supports the perception and whether any complaints have been made by participants relating to such a belief.
    - (2) If resistance to the Demand Conservation program exists, what steps have been taken by the Companies to address any concerns which have been raised?
- A-11. a. The technology-related risk was determined to be overheating of thermostat components creating a potential fire hazard.
- b. Yes, there was financial harm. Because of the potential safety risk, LG&E and KU undertook to replace the load-control thermostats with off-the-shelf programmable thermostats that did not have a load control function. That work began in January 2010 and is now largely complete. The Companies have incurred \$1,986,945 in costs

associated with that replacement program. The costs through 2010 (\$1,940,300) were placed into the DSM balancing adjustment for 2011. The Companies instituted litigation in October 2010 to recover at least some portion of the costs associated with the purchase of the original load control thermostats as well as the costs associated with the replacement program. That litigation is still pending. The Companies will credit customers via the DSM balancing adjustment any net amounts recovered through litigation.

- c. The Companies stopped accepting any further shipments of the load control thermostats on January 2, 2010. There remains a dispute with the vendor regarding the scope and applicability of any warranty regarding the original load control thermostats, which is the subject of the pending litigation, mentioned in b above. The replacement thermostats were purchased from a different vendor.
- d. (1) Since the inception of the program, the Company has heard and received the claim from customers that cycling equipment can be harmful to the equipment and shorten the lifespan of the equipment. The Companies have not witnessed or reviewed any failed equipment or research that substantiates this perception. As this issue is occasionally presented, the Companies seek to educate the customer on the functionality of the switching equipment and its interaction with various AC units.
- (2) The Companies continue to educate customers related to the benefits and functionality of the program, while clarifying any misinformation or misperceptions that the customer may have received. This is done through marketing materials, presentations, one-on-one conversation with customers, and customer-facing events. The Companies have created an open dialogue with the HVAC contractors to ensure their communication with customers regarding the cycling of equipment is appropriate and accurate.



**LOUISVILLE GAS AND ELECTRIC COMPANY  
KENTUCKY UTILITIES COMPANY**

**Response to the Commission Staff's First Information Request  
Dated June 1, 2011**

**Case No. 2011-00134**

**Question No. 12**

**Witness: Michael E. Hornung**

- Q-12. Refer to Exhibit MEH-1, Volume I, at page 21. There are two tables presented as to the projected participants for the Residential Participation Goals and the Commercial Participation Goals. The residential participation goals for Year 1 are 11,900 and the commercial participation goals are 540. In the ICF International Report, Section 10.0 of Volume I, on page 27, the report lists \$6,186,874 for the annual budget and 131,000 participants for the Residential Load Management Program. Also, on page 32 of the ICF International Report, it lists \$321,821 for the annual budget and 5,100 participants for the Commercial Load Management Program.
- a. As to the Residential Load Management Program, the annual budget of \$6,186,874 appears to be correct when compared to the Year 1 budget of \$6,187,000 provided on page 24 of Exhibit MEH-1, Volume I. Explain why there is a difference in participants for Year 1 of 11,900 versus 131,000 as shown in the ICF International Report.
  - b. As to the Commercial Load Management Program, the annual budget of \$321,821 appears to be correct when compared to the Year 1 budget of \$322,000 provided on page 24 of Exhibit MEH-1, Volume I. Explain why there is a difference in participants for Year 1 of 540 versus 5,100 as shown in the ICF International Report.
  - c. Depending on which participant number is correct, does this change the lost sales value that has been calculated for these programs and, if so, does it change or revise the calculated DSM factor or rate? Explain.
- A-12. a. 11,900 is the incremental participant count for Year 1, whereas 131,000 is the program-to-date total. The ICF International Report includes existing participants because the budget incorporates incentive expenses. A significant portion of the budget is related to existing participants' incentives, so it would provide a skewed review if only incremental participants were considered for program effectiveness.
- b. Please refer to the response to part a. above.
  - c. This does not change the lost sales value that has been calculated for the Residential and Commercial Load Management / Demand Conservation Programs.





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**Case No. 2011-00134**

**Question No. 13**

**Witness: Michael E. Hornung**

Q-13. Refer to Exhibit MEH-1, Volume I, at page 24. There is a table of program costs for the Residential Annual Program Budget. Provide in an electronic format, unprotected, with all formulas intact, the seven-year projected programs casts, capital expenditures and capital costs for all programs that are presented in this application and listed in question 6 of this first set of data requests. Year 1 program costs shall be in whole dollars and Years 2 through 7 shall be rounded to thousands (\$000). Use the format of the following table.

<u>Program costs</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>	<u>Year 7</u>
		\$000	\$000	\$000	\$000	\$000	\$000
Administration	\$XXX,XXX	\$XXX	\$XXX	\$XXX	\$XXX	\$XXX	\$XXX
Implementation	\$X,XXX,XXX	\$X,XXX	\$X,XXX	\$X,XXX	\$X,XXX	\$X,XXX	\$X,XXX
Incentives	\$X,XXX,XXX	\$X,XXX	\$X,XXX	\$X,XXX	\$X,XXX	\$X,XXX	\$X,XXX
Miscellaneous	\$X,XXX,XXX	\$X,XXX	\$X,XXX	\$X,XXX	\$X,XXX	\$X,XXX	\$X,XXX
Total	\$5,891,000	\$X,XXX	\$X,XXX	\$X,XXX	\$X,XXX	\$X,XXX	\$X,XXX
<u>Capital Costs</u>	\$296,000	\$XXX	\$XXX	\$XXX	\$XXX	\$XXX	\$XXX
<u>Capital Expenditures</u>							
		\$000	\$000	\$000	\$000	\$000	\$000
Load Control Switches	\$X,XXX,XXX	\$X,XXX	\$X,XXX	\$X,XXX	\$X,XXX	\$X,XXX	\$X,XXX
Programmable Thermostats	\$X,XXX,XXX	\$X,XXX	\$X,XXX	\$X,XXX	\$X,XXX	\$X,XXX	\$X,XXX
Total	\$X,XXX,XXX	\$X,XXX	\$X,XXX	\$X,XXX	\$X,XXX	\$X,XXX	\$X,XXX

A-13. An electronic version of this table is provided on the enclosed CD in the folder titled Question No. 13.



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**Question No. 14**

**Witness: Michael E. Hornung**

Q-14. Refer to Exhibit MEH-1, Volume I, at page 34. There is a table presented as to the projected participants for the Onsite and Online Participation Goals. The participation goals for Year 1 are 1,200 for Onsite and 3,000 for Online. In the ICF International Report, Section 10.0 of Volume I, there is listed on page 43 \$1,460,826 for the annual budget and 7,200 participants for the Residential Conservation/Home Energy Performance Program.

- a. The annual budget of \$1,460,826 appears to be correct when compared to the Year 1 budget of \$1,461,000 provided on page 36 of Exhibit MEH-1, Volume I. Explain why there is a difference in participants for Year 1 of 1,200 and 3,000 versus 7,200 as listed in the ICF International Report.
- b. Depending on which participant number is correct, does this change the lost sales value that has been calculated for these programs and, if so, does it change or revise the calculated DSM factor or rate? Explain.

A-14. a. The correct participant values should be 4,200 for Year 1 and 8,000 for Year 3. The values contained in the ICF International Report were an oversight. The values impacted in the table are updated below.

Program Element/ Metric	LG&E / KU	
	Year 1	Year 3
Participants	4,200	8,000
kWh/Participant	702	646
kW/Participant	0.2	0.2
Cost/Participant	\$348	\$276

- b. This does not change the lost sales value that has been calculated for the Residential Conservation / Home Energy Performance Program.



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**Question No. 15**

**Witness: Michael E. Hornung**

- Q-15. Exhibit MEH-1, Volume II, Exhibit A, was provided electronically in a pdf format. There are 118 pages in this exhibit. Provide Exhibit MEH-1 in an electronic format with all formulas intact, unprotected, and labeled as to program.
- A-15. An electronic version of these tables are provided on the enclosed CD in the folder titled Question No. 15. The exhibits within these tables are model-output driven and as such the formulas are not generated.



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**Response to the Commission Staff's First Information Request  
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**Question No. 16**

**Witness: Michael E. Hornung**

- Q-16. The following existing programs are proposed to be changed: Residential and Commercial Load Management/Demand Conservation Program, Commercial Conservation/Commercial Incentive Program, Residential Conservation/Home Energy Performance Program, Residential Low income Weatherization Program (WeCare), and the Program Development and Administration.
- a. Compare the existing programs that are to be changed in this application with the same programs as filed in the Case No. 2007-00319 application and explain the differences by program.
  - b. If the existing programs were not changed and remained the same as filed in Case No. 2007-00319, what would the effect be on the various DSM components? Explain.
  - c. By program, provide the proposed annual salaries and benefits of the additional employees to be added.
- A-16. a. The existing programs that are to be changed in this application are explained in the chart below.

Residential and Commercial Load Management/Demand Conservation	<ul style="list-style-type: none"> <li>• Addition of FTE for multi-family and commercial segment outreach.</li> <li>• Ability to modify and increase financial incentives for program participation.</li> <li>• Capitalization of newly installed load-control switches / thermostats.</li> </ul>
Commercial Conservation/Commercial Incentive Program	<ul style="list-style-type: none"> <li>• Addition to the energy efficiency retrofits eligible to include refrigeration.</li> <li>• Addition of commercial customized incentives to encourage sustained energy efficient retrofits.</li> <li>• Increase to the rebate cap per facility.</li> </ul>
Residential Conservation/Home Energy Performance Program	<ul style="list-style-type: none"> <li>• Addition of residential incentives for implementation of audit results.</li> </ul>
Residential Low income Weatherization Program (WeCare)	<ul style="list-style-type: none"> <li>• Additional funds for increased weatherization measures.</li> <li>• Increased number of customers served.</li> </ul>
Program Development and Administration	<ul style="list-style-type: none"> <li>• Addition of staffing infrastructure.</li> </ul>

- b. If existing programs remained the same as filed in Case No. 2007-00319, the programs would terminate in 2014, hindering the Companies' ability to meet the 2011 IRP cumulative demand reduction of 500MW. The resulting impact to the DSM tariff components would vary by program and component.
- c. The following chart demonstrates the proposed annual burdened salary budgets of the additional employees to be added to the Residential and Commercial Load Management/Demand Conservation Program, Residential Conservation/Home Energy Performance Program, and Program Development and Administration.

<b>Program</b>	<b>Incremental FTE Count</b>	<b>Burdened Labor Budget</b>
Residential and Commercial Load Management/Demand Conservation	1 Exempt FTE	\$164,540
Residential Conservation/Home Energy Performance Program	.5 FTE	\$82,270
Program Development and Administration	3 Exempt FTEs	\$476,931

The Residential Low income Weatherization Program (WeCare) and Commercial Conservation/Commercial Incentive Program does not have additional staffing infrastructure.





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**Question No. 17**

**Witness: Michael E. Hornung**

Q-17. Are the Companies considering any DSM programs that PPL might have in place in other jurisdictions? Explain.

A-17. The Companies continually research and plan for future energy efficiency programming for its residential and commercial customers. The current DSM programs operated by PPL are similar to those DSM programs currently being operated through Case No. 2007-00319 or those being proposed in Case No. 2011-00134.



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**Question No. 18**

**Witness: Michael E. Hornung**

- Q-18. Explain whether the intent of the Residential Refrigerator Removal program is to remove secondary refrigerators, to replace inefficient refrigerators with more efficient ones, or both. Include in the explanation whether other appliances, such as window air conditioners, have been considered for a replacement program.
- A-18. The intent of the Residential Refrigerator Removal program is to remove and recycle working yet inefficient secondary refrigerators and freezers from residential households. This filing does not include other appliances such as window air conditioners; however, the Companies continue to research and analyze potential future replacement programs opportunities.